

The SHIPPING WORLD


AND SHIPBUILDING & MARINE ENGINEERING NEWS



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WEDNESDAY, DECEMBER 26, 1951

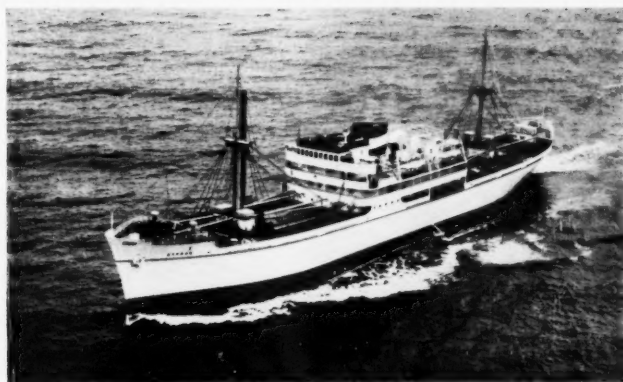
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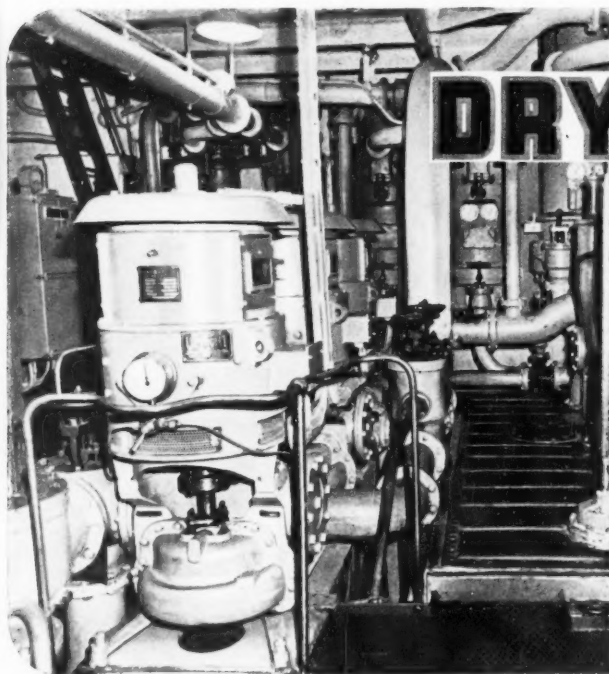
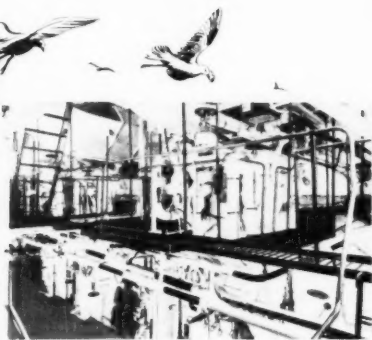
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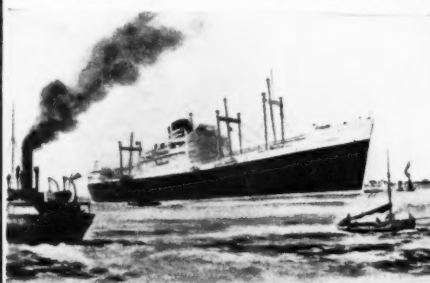
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1883

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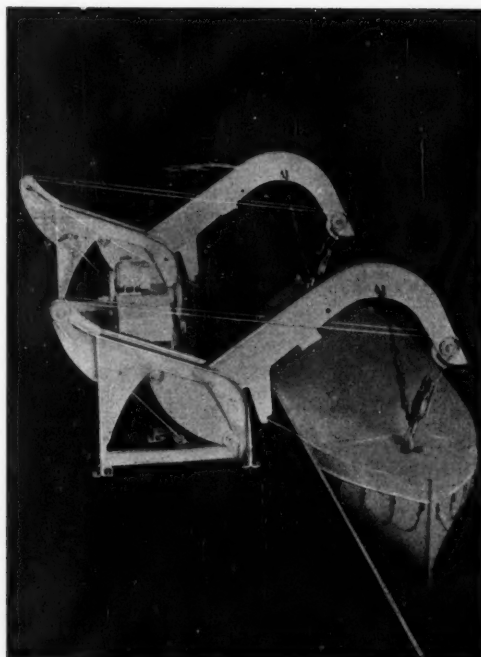
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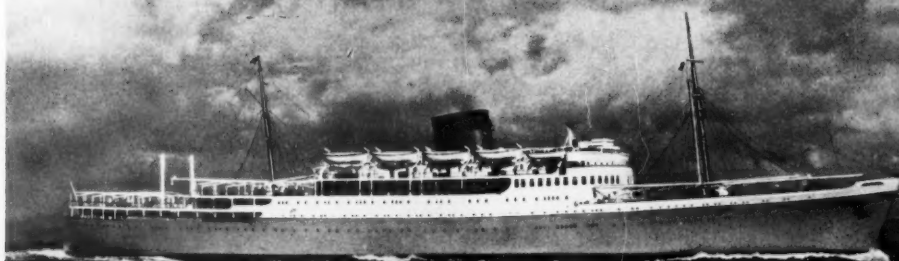
Bulk Cargo Handling Developments	451	International Cargo Handling Coordination Association ...	457
Current Events	451	Cargo Liner City of Brisbane	458
Sayings of the Week	453	Dock Lighting for Singapore Harbour	460
On the Baltic	454	The "Thermco" Boiler Feed System	461
Recent Ship Sales	454	Recent Publications	462
Swedish Shipping and Shipbuilding	455	Round the Shipyards	462
Coal and Oil	456	New Cross-Channel Car Ferry	463
Official Notices	456	Pictures	464
Book Reviews	457	New Contracts, Launches and Trial Trips	465
San Francisco Bay Ports	457	Maritime News in Brief	466



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THE SHIPPING WORLD

BULK CARGO HANDLING DEVELOPMENTS

THE SHIP designed for the carriage of bulk cargoes has always been kept as simple as possible. As far as cargo handling is concerned, this has meant that any equipment required for handling bulk cargoes has been sited on shore as much as possible, and has not been owned by the shipowner. There are many advantages in this arrangement. Among them, the equipment is likely to be in use more regularly when it is on shore; while in the event of a particular ship being laid up, a smaller amount of capital is lying idle. Perhaps the chief reason, though, has been the great importance of flexibility to the general cargo carrier, an attribute which the fitting of expensive and possibly specialised cargo handling equipment would do much to destroy. The ability to carry any cargo anywhere has always been the prime feature of the tramp ship, whether ocean-going or coastal, and it remains at present the basis of the carriage of bulk cargoes.

Will this be so in the future? The trend of economies in the modern world is all towards increasing specialisation, and there can now be observed a tendency towards the position where the fully flexible chartered ship supplies only the marginal requirements of a given trade, to an extent depending on the fluctuations experienced in the trade, with regular shipments being carried in more specialised ships. This is, to some extent, the case in the carriage of oil, and it seems that it may soon be so in the ore trade as well. Both of these, however, are primarily ocean-going trades. Coastal shipping has hitherto followed along the same lines as its deep-sea counterparts, but here an even more revolutionary trend has recently been initiated. This is the installation of fully mechanised bulk cargo handling equipment in the ship. Two Swedish cement carriers are now in operation after having been fitted with a system for handling their cargo of cement in bulk which is so completely mechanised that only two men are required to operate it, one in the ship and one on shore. It has also been announced that a ship is to be built in Great Britain, for Associated Portland Cement Manufacturers, which will have machinery for the discharge of bulk cargo.

It must be emphasised that the coastwise carriage of a cargo such as cement is an ideal instance for

installations of this sort. In deciding whether to put equipment of this sort on the ship or on shore, the criterion (other factors being equal) will be the amount of time which each installation spends doing useful work. This may be expressed differently as the minimum number of cargo handling installations required for a given volume of traffic. An allowance must, of course, be made for the fact that if it is installed in the ship the machinery occupies valuable deadweight capacity which might otherwise be earning revenue. Conditions leading towards the choice of the ship as the site for such equipment are thus short voyages, so that the ship spends an increased part of its time in loading and discharging, and a wide range of ports to be served, so that equipment on shore would spend much of its time idle. The coastal cement traffic fulfils both of these conditions.

Should these cement carriers prove satisfactory in service, it will be interesting to see how far the principle will spread. There is no inherent reason why equipment of this sort should not be used to handle grain, small coal, slurry or other cargoes. If an efficient method of cleaning the gear between cargoes can be evolved, much of the traditional flexibility of the tramp ship might be maintained, while acquiring the efficiency of modern handling methods. For ocean-going shipping, of course, the installation in ships of such machinery is not likely to prove economic. More advanced shore installations seem at present to be the only way to combat rising wage costs in this field.

If in the future mechanised methods of handling bulk cargoes should prove to be the only economic ones, this will accelerate the present trend towards the carriage of such cargoes in large ships, working between a limited range of ports, as it is not likely that the necessary equipment would be economic in the smaller ports. This refers, of course, primarily to arrangements for the discharge of such cargoes, as the loading ports are normally comparatively few in number, and their equipment is already largely mechanised. However, should the coaster with its mechanised handling equipment prove to be an effective competitor of road and rail transport, an increase may be expected in the use of transshipment and coastwise distribution.

Current Events

Muzzling the Ox

ABOUT two thousand years ago, St. Paul wrote: "Thou shalt not muzzle the ox that treadeth out the corn." That is what the last Government had been doing up to the General Election. As a result of their policy, there was no incentive for anyone to work his hardest because the tax collector took any sum up to 19s. 6d. in the £. The same Ministers went so far as to encourage the weekly wage earner to work less and demand more for such work as he did in his

shorter working day. And all this took place after six years of crippling war, when the nation was on the economic rocks. For a time, everything looked rosy. The basic industries were taken over and became monopolies so that the competitive incentive might be abolished and, at the same time, the foundations were laid of the Welfare State, with the help of American and Canadian loans, Marshall Aid and, finally, Dalton's "balance of the sterling area." Now that we have to bear the heavy burdens which the Socialists

placed on the shoulders of all of us, brain as well as hand workers, we have no "easy money" coming to us from overseas and we are spending too much and earning too little because we are not working sufficiently hard. Who now believes, as the ideologists, with their high-flown theories, declared, that men and women will work in the interests of the nation (and hence the schemes of nationalisation) and will cease to struggle to profit themselves or their wives and families? That bubble has been exploded as the cost of living has risen. Wages are the main item in fixing prices and, consequently, as the hours of work have fallen and pay, including overtime, has risen, the price of everything, including, of course, ships and their operation, has mounted up. No shipbuilder in his senses will quote a fixed price today. As he does not himself know what the completed ship will cost, he can deal with the shipowner only on the understanding that the higher sums he has to pay in wages in his shipyard, as well as for everything that comes into it, must be added to the cost of the ship. Neither the builder nor the owner can plan ahead with any assurance in these circumstances. Freight rates may fall, but costs will apparently continue to go up and neither party to a building contract is a Croesus.

Fool or Rogue?

MR. H. E. DODD, of the Cairn Line, summed up the position succinctly the other day when he remarked that ships were more beautiful and efficient than ever, but owners were very disturbed at the fantastic heights to which prices had risen. Another canker, he added, was the slow turnaround, and, although rates were better, a great deal of the "sugar" was eaten up by heavy delays in ports and increased port charges. He pointed out that the 20s. per ton increase in the price of bunker coal would mean an additional charge for the Cairn Line of £1,000 per ship per round voyage of eight weeks between the Tyne and Canada. That is the general experience of shipowners. Mr. W. Robson Brown, M.P., a well known industrial leader, described the position recently in a few telling sentences when he said that we live in a strange world, where a businessman is called a rogue if he makes a good profit and a fool if he makes a loss. "Personally, I would rather be a rogue than a fool." We have got to get back, as he remarked, to a sane world where a successful businessman is respected and an efficient workman is valued and admired, and both work in harmony. "I believe that a successful business is a national asset. I believe a good manager receives great moral and spiritual satisfaction from running a successful business." In words which everyone associated with the maritime industries will endorse, Mr. Robson Brown declared that the future of Britain rested squarely on private enterprise working for the public good. The suspicion that more work merely means more profit for investors and that more efficient plant will spell unemployment must be removed.

Economic Education

"EDUCATE, educate, educate," Disraeli proclaimed many years ago. What is needed is education in the ABC of industrial economics.

It must be the personal challenge and duty of every employer and his management to spare no efforts to remove this misunderstanding if it exists in their undertaking. They must educate themselves and their men in the principles of good management (labour relations). For to do this is to make a great contribution to the stability and recovery of our country, and the greatest guarantee of a happy, trouble-free and contented country. I would also say this: any man who stands in the way of British recovery, be he politician, manager, trade union official, shop foreman, shop steward or trouble-maker at the bench—these men are traitors to us all.

The ox must be unmythologized. That will be the task of the Chancellor of the Exchequer and every industrialist, whether he is at the head of a small firm or a big one, hopes that he will find means of setting industry free

and giving every worker, from the top to the bottom, real incentives to work harder. That is the only hope if we are to have a future worthwhile fighting for. The ordinary man and woman must be taught that most of our food and practically all our raw materials come from abroad and must be paid for by exports, visible and invisible. We are running increasingly into debt because we are not producing enough.

A Cargo Ship Gas Turbine

THOUGH the shipping community has sensed that gas turbines are likely to play an important part in the propulsion of ships at some future date, it has been difficult as yet properly to assess the more immediate possibilities of such machinery. The development during recent years has been extensive, but over a range of powers not of direct interest to the commercial shipowner. The only ocean-going vessel yet fitted with a gas turbine is the *Auris*, and even in this case the machinery forms only one of four units in a propulsion system depending on electric transmission. Shipowners have been asking whether it is yet possible to order such machinery with greater output suitable, for example, for installation in a cargo liner or tramp of ocean type, and further, if it is possible, what are the advantages to be gained. The answers to these queries are contained in an excellent paper given before the American Society of Naval Architects and Marine Engineers at the November meetings in New York. The author, Commander John J. McMullen, of the United States Navy, is employed in the machinery arrangements branch of the Navy Department Bureau of Ships. The objective of the paper was to discuss a conservative type of gas turbine plant for a cargo vessel operating under present-day temperature and pressure limitations and designed for long life. This is an important basis, since, although some of the developments now proceeding may enable quite considerable advances in efficiency and decreases in size of machinery to be made, these are still achievements of the future and must be disregarded when trying to appraise the progress actually accomplished. The number of different types and arrangements of gas turbine plant are practically infinite, the author stated, but his paper is based on a comparison between open and closed cycle plants, both being compared with steam machinery as at present installed, and all three types being considered as they have been or would be applied to an American C-3 type cargo liner. The author therefore gives his views on the type of gas turbine machinery which would best suit a cargo vessel of slightly less than 8,000 tons gross, having a speed of 16.5 knots on a mean draught of 27.3 ft. and with a propelling power of 8,500 s.h.p. designed for a normal long life in ocean-going service.

Closed Cycle with Controllable Pitch Propeller

COMMANDER McMULLEN contended that a disadvantage of the open cycle gas turbine is the large required size of exhaust gas uptake and funnel as well as of the air intake supply trunking. It is interesting to note, however, that both the open and closed cycle turbine installations would be 30 per cent less in weight than equivalent steam turbine machinery, the gas turbines giving an average weight of between 40 and 43 lb. per s.h.p. against about 77 lb. for the steam plant. In the matter of space occupied also the gas turbines provide savings over the steam turbine engine room, taking 25 per cent less space in the ship. This, at a time when so many ships carry "cubic" cargoes, is of considerable commercial value, though it must be remembered that any advantage would be largely nullified by the present out-dated tonnage measurement laws. This limitation merely gives added point to the already outspoken opposition to any long continuance of the present farcical system of relating propelling power allowance to tonnage measurement rather than actual space needs for operating the machinery. The main difference between open and closed cycles may

he said to be that with the first system air is taken in from atmosphere, makes one circuit and is discharged, whereas in the closed cycle, the operating medium, which may be air or some other medium, is retained continuously at an elevated pressure. Though the efficiency of the latter system depends on that of the air heater from which the heat energy is supplied, it has many advantages over the open cycle, among which perhaps that of greatest interest to the shipowner is the ability to operate at high efficiency under part loads. The author has made it plain that he considers the fitting of a controllable pitch propeller to be the best answer at present to the difficulties of providing reverse power with a gas turbine. The fact that a larger propeller hub may be required is not important, it was stated, as the propulsive coefficient does not decrease with increase in hub size. The author suggested the use of an auxiliary steam boiler with turbo-generators for auxiliary purposes, and in this case the gas turbine plant would be started by small steam turbines supplied from the auxiliary boiler.

Modernisation by Conversion of Engines

It is gradually becoming realised that the present shortage of steel in every country is not likely to be of short duration, and indeed will be a function of the rearmament period. The shipbuilding industry in every country affected by rearmament is being limited in maximum production by the availability of steel, not least in Great Britain and Northern Ireland. The matter is of some moment to those shipowners with out-of-date ships, or those built in large numbers during the war, which have slow speeds and steam reciprocating machinery of a relatively simple type. The hope that when the tanker programme diminished, which it shows no sign of doing as yet, large numbers of dry-cargo ships could be placed for fairly early delivery has not been realised. Though there may be exceptions, most shipyards asked to quote for the building of a 10,000-ton deadweight tramp would talk in terms of three or four years or even longer delivery in the present circumstances. It is inevitable, therefore, that some owners should be turning their thoughts to the modernisation of wartime tonnage, and in particular the substitution of more efficient propelling machinery with greater power. Many ships have had their coal-burning boilers modified so as to burn oil fuel, but this does not increase the speed of the ship, while experience during a time of high freights is showing that an extra knot or two might have a considerable and beneficial effect on economic performance. Obviously one of the modern and highly developed steam reciprocators might be substituted for wartime machinery, but in this case, as in the case of the more popular slow-speed oil engines, the difficulty is in the delivery of the machinery. It may be, therefore, that a new impetus will be given to the consideration of multi-engined propulsion, providing that smaller engines can be produced more quickly than the single prime mover. It is difficult indeed to find any engine manufacturer who is short of orders at the present time, but the matter is worthy of investigation. With more powerful machinery and propellers of a type accepted as being most efficient, the average cargo ship sailing with a cubic cargo, that is not down to her marks, could give a much better performance than at present.

A Century of Instruments

THE FIRST century in the existence of Negretti & Zambra, the well known instrument makers, ended last year, and to celebrate the occasion the firm has produced a booklet describing its history over this period. In its early days the partnership was chiefly concerned with meteorological instruments, and was closely connected with the marine field. In 1857 a double bulb deep-sea thermometer was specially devised for Admiral Fitzroy, the great hydrographer and meteorologist of the period. This type, incidentally, is still the only

one used for temperature measurement at great depths: it has been used for depths up to 15,000 feet. Another project undertaken by the firm—at the instigation of Admiral Fitzroy—was the development of mercurial barometers capable of withstanding the concussion of heavy gunfire on board warships. In this, too, they were successful. With the passage of time the scope of the firm's interests widened, and the manufacture of optical instruments was undertaken. After the end of the 1914-18 war, however, this was given up, and work was concentrated on the production of industrial and aeronautical instruments. A recent invention in this latter field is a fuel flowmeter for aero engines. Formed as a partnership, Negretti & Zambra remained as such for almost 100 years, fresh partnerships being formed between members of the two families on the deaths of the senior members. In 1946, however, the business was converted into a private company, and it became a public company in 1948.

The Builders of the "Queens"

THERE is a good story about the unnamed American soldier, travelling in the *Queen Elizabeth* when she was a troopship, who asked one of the officers why it was that Britain could not build such fine ships as that one. The story is probably apocryphal, in any case, but no such innocent misunderstanding could exist in the mind of anyone in this country. There can be few shipbuilders whose names are known so generally among the ordinary public than John Brown & Co., Ltd. Not so many, however, will be aware that ships have been built by this firm at the Clydebank shipyard for a century. Special interest is attached, therefore, to the centenary of the company which has been celebrated at a dinner in Glasgow. In proposing the toast of the company, Lord Weir referred to the fact that Clydebank really began to figure prominently in shipbuilding and marine engineering with those almost legendary figures Robert Napier and the brothers Thomson almost 150 years ago. It was in 1851 that the Thomsons added a shipyard to their engine works and thus founded the present great shipbuilding and engineering enterprise. The shipyard was first established at Govan, but was moved down to Clydebank in 1883 (the year in which THE SHIPPING WORLD was founded). The name of Clydebank Shipbuilding & Engineering Company was adopted in 1896, but three years later, the Sheffield firm took a controlling interest, John Brown & Company having purchased, as Lord Weir said, a rich inheritance. A period of expansion and development resulted in the winning of new clients such as the Canadian Pacific and the New Zealand Shipping Company, while retaining old and valued clients like the MacBraynes, Hutchisons, and the Cunard and Castle Lines. The record in making contributions towards national defence in warship building is equally outstanding, and the famous warships which have been launched from the Clydebank yard include the *Hood*, *Duke of York*, *Vanguard* and *Indefatigable*. Now comes the welcome news that John Brown are to build two Cunarders of 20,000 tons gross for the Canadian services, for delivery in 1954-55. It is sad to reflect that each of these vessels may cost as much as the *Queen Mary* did.

SAYINGS OF THE WEEK

A NOTE OF WARNING

"Unless we get some reduction in taxation it will be quite impossible for shipowners to maintain fleets at the levels they wish."—Mr. Frank Charlton, deputy chairman of Furness, Withy & Co., Ltd.

DENATIONALISED STEEL

"It remains our firm policy to try to find a solution which will combine the benefits of free enterprise with effective safeguards for the public interest and will, we hope, secure a firm and lasting settlement of this difficult question."—Mr. Duncan Sandys, Minister of Supply.

ON THE "BALTIC"

A BUSY YEAR FOR SHIPBROKERS

By BALTRADER

SHIPBROKERS have had a busy year, and those of the younger generation have fully proved themselves *au fait* with the many-sided aspects of their profession. One mentions this because the postwar shipbroker was handicapped at first by a late start after release from war service, and for some years after by the automatic nature of controlled chartering. The older members themselves had much to learn before they could impart it to their juniors, because the upheaval of the war completely changed the direction of much of the world's cargo movements. Even where trades are fundamentally unchanged, the operators are often different and their methods unlike those of their predecessors. As an instance, the Ministry of Food retains the right to declare the discharging port until a vessel is within 48 hours of sailing distance from the coast. The earlier notice which merchants used to give facilitated owners' arrangements for discharge and subsequent employment, drydocking or repairs. It is remarkable how much of the most interesting business is held today by agents who, until recently, have been unknown in that particular market. On the other hand, many firms whose signature has not for ten years been seen on the charterparties for homeward timber voyages must again be cultivated by the shipbroker. The return of imports of sawn timber to private hands adds scope and variety to the business of covering the market. It has already this year applied to chartering operations from the Baltic and will, in future, concern chartering from North America as well.

A Year of Great Activity

The shipping side of the Baltic Exchange has experienced a year of great activity and much more than maintained its place as the indispensable meeting place of representatives of the world's shipowners and charterers. Nowhere else can the whole position of the supply of tonnage and cargo be obtained at a moment's notice. The Government of India shows its recognition of this when availing itself of the services of the Baltic Exchange Chartering Committee to effect the chartering of grain ships from North America and North China to relieve India's shortage of food.

Christmas has been the preoccupation of the past week and business has necessarily been reduced, although last week was a time when some owners had to get down to business in order to ensure that early vessels would be covered for employment. On some occasions, the recess helps nonchalant charterers to reduce owners to a receptive state of mind, but last Christmas it was the other way about. The owners then assumed a holiday air which was not in keeping with the charterers' anxiety to cover their requirements. This year the position is not so clearly defined, for in some directions owners find it a little less easy to obtain what they think is the market rate; in other quarters, for instance, India and both the Eastern and Western sides of the Pacific, the supply of early tonnage is rather small and tonnage strongly held. It will be interesting to see how the New Year opens, but whether rates then move up or down it is generally expected that demand for tonnage will in general be satisfactory to owners in the coming months.

Continued Demand for American Coal

The demand for American coal continues in spite of the enormous tonnage already chartered, including scores of vessels which are fixed to load consecutive cargoes to Europe. In addition, there is the new season sugar to move, beginning in the early part of the year, and chartering has already begun, and phosphate and sulphur cargoes are frequently quoted for shipment

from the Gulf of Mexico. The Baltic Chartering Committee has further inquiries for grain to this country from the United States and is endeavouring to secure a lower basis of rate, but so far without success. Australian grain charterers have lately been able to obtain cheap tonnage for homeward employment, by waiting to pick up an odd vessel which must come home. Owners hope that these charterers will eventually require to come into the market on a bigger scale and that they will then have to offer better inducement. They usually start active chartering for the new season wheat in January, if they have not done so earlier. The rate of 117s. 6d. for grain recently accepted from Australia to the United Kingdom is astonishingly low in comparison with what charterers have to pay in any other grain charter market today.

RECENT SHIP SALES

Twinscrew motorship *Dunster Grange* (9,484 t.g.), owned by the Houlder Line, Ltd., and built in 1928 by the Fairfield S.B. & Eng. Co., Ltd., has been sold to Finnish buyers with delivery Liverpool for about £325,000. She has a deadweight capacity of about 9,940 tons, and a speed of 14½ knots, and will be renamed *Vasa*.

Norwegian motor tanker *William Strachan* (6,165 t.g.), owned by Willy Oppens Rederi A.B. Oslo, and built by Workman, Clark (1928), Ltd., Belfast, has been sold to Italian buyers for about £280,000. She carries about 9,945 tons d.w.

Motorship *Marlon* (368 t.g.), owned by the Erimus Shipping Co., Ltd., Middlesbrough, and built in Holland in 1909 as the *Venus* (later *Begonia* and *Empire Junquah*), has been sold to the Limerick Steamship Co., Ltd., Limerick, and she is to be renamed *Galtee*.

Cargo steamer *Kyle Queen* (ex *Cornish Coast*, 616 t.g.), owned by F. L. Dawson & Co., Ltd., Newcastle, and built by R. Williamson & Son, Workington, in 1918, as the *Volana*, with engines by Ross & Duncan, has been sold to Turkish buyers and renamed *Kardesler*. She has a deadweight capacity of 770 tons.

Swedish motor tanker *Gavilla* (802 t.g.), owned by L. Glucksmann, of Gothenburg, built at Trieste in 1947, has been sold to buyers in Stockholm. She is of 1,300 tons d.w., and will be renamed *Alba*.

British Motor and Sailing Ship Owners

The annual meeting of the British Motor & Sailing Ship Owners' Association was held on December 18 at the Chamber of Shipping of the United Kingdom. Mr. R. S. Coles (John Carter (Poole), Ltd.), the retiring chairman, said that conditions for the employment of the smaller types of coasting ship with which the Association was concerned had been better in 1951 than in the previous year, although unfortunately running costs continued to increase and they had to face further rises in the coming year. With increased freight rates and the stronger demand for tonnage he could only point out to charterers that quicker despatch in loading and discharging would benefit both them and the owners. He hoped that something could be done in this respect as at present United Kingdom ports compared very unfavourably with Continental ports. Mr. Coles was re-elected chairman, and Mr. Tom Metcalf (Metcalf Motor Coasters, Ltd., London) was appointed vice-chairman in succession to Mr. Paul Goldsmith (E. J. & W. Goldsmith, Ltd., London).

The Union Insurance Society of Canton, Ltd., established in 1835, has issued a brief illustrated history of the company. An interesting illustration is that of a copy of the company's scale of premiums in 1845. The balance sheet of the company for the year 1882 is printed on a two-page spread in the centre of the booklet.

SWEDISH SHIPPING AND SHIPBUILDING

INCREASING NUMBERS AND SALARIES OF SHIPYARD WORKERS

By THE SHIPPING WORLD'S Own Correspondent

IN A comparison between the salaries of shipyard workers in 1947 and 1950, the trade union weekly *Metallarbetaren* (No. 47) finds that the average annual salary has increased from Kr.2,220 in 1947 to Kr.6,740 in 1950. This means an increase of 22 per cent, taking the 8 per cent increase of the cost of living index compiled by the Social Board into consideration. As far as the group "other employees" is concerned, the rise of the annual salary is 19 per cent to Kr.9,380 in 1950. In 1950 the Swedish shipyards paid in all Kr.147 million to their 20,400 employees. According to the annual reports of the shipyards there was also a 6 per cent increase in the number of workers, whereas the number of other employees showed a 9 per cent increase. The shipyards included in the table below showed a total net profit of Kr.8.7 million for 1950 after tax deductions. Of this profit the shareholders received Kr.3.9 million. The total dividend of those shipyards which existed in 1938 was Kr.1.9 million. If no dividends had been paid to the shareholders, the editor comes to the conclusion that this would have meant an increase in the annual salary of only Kr.190, or 2.7 per cent, per employee.

NUMBER OF WORKERS AND OTHER EMPLOYEES

Shipyard	Workers			Other Employees		
	1947	1950	Change Per Cent	1947	1950	Change Per Cent
Ekensberg	345	310	10	77	70	9
Eriksberg	2,715	2,717	0	574	642	12
Finnbo	449	422	6	96	101	5
Gäve Varv	246	259	5	39	43	10
Göta Verken	4,728	4,529	4	848	929	10
Helsingborgs Varv	597	598	0	87	95	9
Kockums	3,249	4,023	24	701	747	7
Lindholmen	1,224	1,103	10	298	283	5
Lodöse Varv	120	101	16	29	23	21
Oskarshamn V.	843	826	2	135	142	5
Sölvesborg V.	323	253	22	47	46	2
Uddeålla V.	329	900	174	89	188	111
Oresundsvarvet	807	900	12	163	160	2
All yards	15,975	16,941	6	3,183	3,469	9

The new liner under construction for the Swedish American Line at the De Schelde yard at Flushing will have a length of 600 ft. and a beam of 77 ft. After a recent visit to the yard the managing director of SAL, Mr. Erik Wijk, the technical director, Mr. E. Th. Christiansson, and the head of the passenger department, Mr. Göran von Essen, reported that the two main engines of 17,500 i.h.p., from Burmeister & Wain, of Copenhagen, are being tested before shipment to Flushing, while the six auxiliary diesel engines, which will drive six ASEA generators with an aggregate capacity of 3,300 kW, have been partly tested. The refrigerating equipment, supplied by the builders, comprises four freon compressors with a capacity sufficient to maintain a temperature of 20 deg. C. in the refrigerated holds during tropical voyages. When not used for refrigerated cargo, these holds will be arranged for carrying motor cars.

The Wallenius concern, Stockholm, has seven large vessels, totalling 95,000 tons d.w., under construction or on order. A tanker of 17,500 tons will be delivered in May next year by Göta Verken, and the delivery of a 16,200-ton tanker from Kockums is expected to take place in June. Two oil-burning steamers of 10,900 tons each are to be delivered for the concern by Bartam & Sons, Ltd., Sunderland, in May and August respectively. Deliveries in 1953 comprise a 13,500-ton tanker from Kockums and a 4,500-ton steam tanker from Helsingborgs Varv. In June 1954 Kockums will deliver a 21,500-ton tanker with a De Laval steam turbine. As the shipbuilding costs are now considerably higher than initially calculated, the concern has applied for a licence to sell the 16,225-ton tanker *Soya*, built by Kockums in 1944, to Norway.

The Oskarshamn yard has secured orders for eight

vessels, of which one, of 9,400 tons, is for Rederi Re-Be, Helsingfors. Moreover, a number of trawlers will be delivered to the Soviet Union next year, as well as a vessel of 3,000 tons for Rydbergs Rederi, Gothenburg, a 2,000-ton vessel for Uddeholms A/B, and a passenger vessel, carrying 400 passengers, for Angfartygs A/B Bore, of Åbo, Finland. A motor vessel of 4,300 tons will be delivered to A/S D/S Björn, Oslo, in November 1953.

Trelleborgs Angfartygs A/B has ordered a tanker of 24,000 tons d.w. from Kockums, Malmö. This vessel will not only be the largest so far ordered by the company, but also the first vessel of the owners equipped with steam turbine of the De Laval type. The delivery will take place in February 1956. Kockums will also build a 16,200-ton tanker for Jörgen Bang, Kristiansand, a tanker of 24,000 tons for A. G. Olsen, Stavanger, and a 10,600-ton motor vessel for Wilh. Wilhelmsen, Oslo.

A tanker of 34,000 tons has been ordered by Rederi A/S Kosmos, Sandefjord, from Göta Verken, which will deliver the vessel during the summer of 1955. This Norwegian tanker is the largest vessel ever ordered in Sweden. However, negotiations are going on for the building of two large tankers of similar size at the same yard. Norway is still the most important customer of the Swedish yards, with orders as at October 1 of 72 vessels aggregating 1,053,125 tons d.w., which means an increase of 30 vessels and 380,175 tons in comparison with the figures for last year. While 53.5 per cent of all vessels built in Sweden during 1950 were delivered to Norwegian owners, this figure has now been reduced to 36.2 per cent. An order for a 9,150-ton motor vessel for Agdesidens Rederi A/S, Arendal, has been secured by Eriksbergs Mek. Verkstad.

Fishing Vessels and Coasters

Within the next few weeks three funny-fishing vessels of the Pacific type will be delivered by the Sverre yard, near Gothenburg, to the partly State-owned Colombian fishing company "Icepescas". These vessels are of 130 tons each and they are propelled by diesel engines developing 170 i.h.p. and driving them at 10 knots. The length of the vessels is 83 ft., the beam 22 ft. and the draught 10 ft. The Colombian company first contemplated ordering vessels of the Swedish West Coast seine netter type, but later found that these would not be suitable for tropical conditions.

More coasters have been ordered from yards in Germany. The C. Lüring shipyard at Brake, Oldenburg, will deliver two vessels of 530 tons d.w. and one of 440 tons d.w. to three owners at Skärhamn during the course of the next summer. The coasters will be equipped with 6-cyl. Danish Alpha diesel engines, developing 360/400 i.h.p. Another coaster of 440 tons d.w. for a Skärhamn owner is to be constructed by Rolandwerft, Bremen, and propelled by a MAK diesel. The speed of the four vessels is about 10 knots. In the above cases the State Loan Fund for small-sized tonnage has put Kr.400,000 at the disposal of each owner, sufficient to cover 70 per cent of the building costs.

Angfartygs A/B Tirling recently sold two motor vessels of Great Lakes type to the Swedish-American Line. The *Erland*, which was delivered by the Aalborg yard in 1943, has in this connection been renamed *Erholm*. The other vessel, the *Roland*, was delivered by Oresundsvarvet at Landskrona as late as in June this year. Hitherto the vessels have been employed by the Swedish Orient Line during the winter months on the company's Levant services when the Great Lakes were closed, while they were operated on the Great Lakes by the Swedish-American Line during the summer.

COAL AND OIL

MORE N.S.A. SHIPS TO CARRY COAL

THE FLOW of American coal across the Atlantic continues in full spate. Congestion in the loading ports appears to have been successfully overcome, and with continual additions to the number of N.S.A. ships operating in the coal shuttle service, even more coal should be shipped in coming months. There were recently some 300 Liberty ships on the trans-Atlantic coal run, and this number will have been increased by a further 80 or 85 ships by the end of this month. In all, the N.S.A. has withdrawn some 500 ships from reserve. Mr. Boyce Luckett, chief of the Shipping Allocation Administration Division of the Defence Mobilisation Administration, is reported to have said in Washington recently that it is at present planned to send abroad a total of 4,000,000 tons of coal during each of the months of January and February. This is an increase of 300,000 tons over the quantity shipped in November. Some 20,000,000 tons of coal have been scheduled by E.C.A. for shipment to Marshall Plan countries in the first half of 1952. The financing of this amount, however, is not yet assured. This was revealed after meetings had been held in Washington between American mine owners and trade union leaders and E.C.A. officials, in which the suggestion was made that shipments during this six months period might be increased to 50,000,000 tons. Sweden is to join the list of countries receiving American coal in N.S.A. vessels. Assistance has been requested by Sweden in the transport of coal, and the necessary ships have been allocated. Mr. Christian H. Lundegaard has been appointed acting chief of the N.S.A. in the United Kingdom and Europe, and has arrived in London, where he is to establish his headquarters.

Fluctuating Tanker Rates

THE LATEST edition of the chart of tanker rates produced by Conrad Boe, Ltd., A/S, of Oslo, is printed below. It shows well the remarkable fluctuations in voyage rates which have been experienced in the tanker market this year. By the middle of November, when this chart was prepared, the average level of rates had reached M.O.T. plus 300 per cent for the second time this year, having fallen at an intermediate stage to M.O.T. plus 70 per cent. There has since been a check to the rising trend, and rates at present show only a small increase on this figure. Although the marked similarity between the sterling and dollar charts that

was noticeable before devaluation no longer holds good, the chart for dollar fixtures prepared by Conrad Boe (not reproduced here) shows that the general level is much the same in each case, with the peaks and depressions reaching corresponding figures.

Shorter Items

WITH the increasing volume of petroleum movements through the port of Rotterdam, plans are being proposed for the construction of a third oil dock. It is reported that such a project would depend on the addition of a third oil refinery in the port area. Both the seaway to Rotterdam and the docks themselves are deep and wide enough to handle the largest supertankers afloat. During 1950 some 9,000,000 long tons of mineral oils cleared the port compared with 4,900,000 in 1949. Approximately 6,900,000 tons came as seaborne imports, a gain of 50 per cent over the previous year.

TANKERS re-entered the Shatt-el-Arab last week for the first time since loading ceased at Abadan. They were loading at the new oil terminal at Fao, a port in Iraq, 40 miles south of Abadan, which is connected by pipeline to the new oilfield at Zubair, in Southern Iraq. The field is operated by the Basra Petroleum Oil Company, a subsidiary of the Iraq Petroleum Company, in which shares of 25 per cent are held by Anglo-Iranian and Shell. Two loading jetties have been built at Fao, with eight storage tanks.

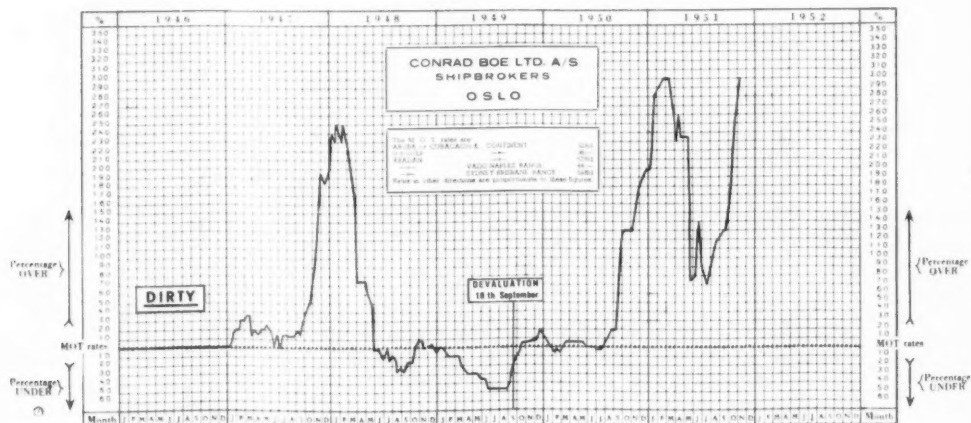
OFFICIAL NOTICES

New Companies

WM. MILBURN & CO., LTD., Milburn House, Newcastle-on-Tyne.—Registered December 10. To take over the business of Wm. Milburn & Co., Ltd., carried on at Newcastle-on-Tyne, and to carry on business of shipowners, ship managers and brokers, etc. Nominal capital: £250,000 in £1 shares. Directors: Sir L. J. Milburn, Bt., Guisance, Acklington, Northumberland; A. W. Milburn, Fowberry Tower, Chatton, Northumberland.

BRAZENE TANKER CO., LTD., STEVENSON HOUSE, 155 Fenchurch Street, London, E.C.3.—Registered December 7. Nominal capital: £100 in £1 shares. Directors: Not named. Subscribers: P. A. Wood, 4 Stockwell Avenue, London, S.W.9 (clerk); A. W. Pears, 6 Colchester Avenue, London, E.12 (clerk).

[Information from *Jordan's Daily Register of New Companies*]



INTERESTING FACTS ABOUT OIL

No. 12. Can a Duck Swim?



You may not have heard of the classical experiment in which a duck was placed in a vat of water containing a minute percentage of petroleum detergent. The duck sank!

The reason for this phenomenon is that petroleum detergents are not only efficient cleaning agents, but are very effective *wetting agents*. That is, they greatly reduce a force known as *surface tension*, which is peculiar to the surface of all liquids and tends to prevent them from spreading over any object with which they are in contact. An ordinary needle, for instance, will float—supported by this force if carefully placed on water. By reducing surface tension, petroleum detergents enable water to spread more rapidly and penetrate more thoroughly.

It is the combination of this wetting power with their efficient cleaning action—whereby they cause dirt and grease to emulsify with and remain suspended in water—

that has swept these new detergents into a multitude of industrial and domestic applications.

Until recently, the detergent generally available was conventional soap, produced from animal fat or vegetable oil. An outstanding difference between soap and petroleum detergent is that the former makes an insoluble scum when used in hard or salt water and, in consequence, becomes largely ineffective; whereas the latter does not form scum and retains, in both hard and salt water, its ability to remove dirt and grease and to keep this matter in suspension.

Industrially, these new detergents are used for a remarkable variety of applications. To quote only a few examples, they are used throughout textile processing, from scouring raw wool to securing penetration and even shade in the dye bath: they are used as wetting, dispersing and foaming agents for fire-fighting, for dust suppression in coal mines, in horticultural sprays and in cosmetics; they ensure a more fluid mix in the making of cement and concrete, and are used on farms for washing animals and equipment.

Domestically, petroleum detergents have wrought a revolution in the kitchen sink. Most British women are now using, with increased effect, liquid and powder detergents, which—although few realise it—are derived in some degree from petroleum.

INTERNATIONAL OIL BUNKERING



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BOOK REVIEWS

The Navy Year Book and Diary, 1952. (Published by The Navy League, Grand Buildings, Trafalgar Square, London, W.C.2.)

The latest edition of this well-known publication contains, as is usual, a wide range of excellent articles by naval writers, and is attractively produced. Criticism, however, may perhaps be expressed of the choice of subjects. These are largely concerned either with history or with what may be termed the sidelines of the Navy's activities, and little attempt has been made to discuss the way in which the Navy is developing or the ships it is now building. Nor is any "meat" provided for the schoolboy shiplover, from whom may come in the future both the manpower for the Service and the support that it will need in Parliament.

Deep Diving and Submarine Operations. by Sir Robert H. Davis. (The St. Catherine Press, Ltd., 39 Parker Street, London, W.C.2. Price, 35s. net.)

This is the fifth edition of this book to be published. It is a complete manual of deep-sea diving and divers' equipment. No author more experienced in this subject could be found than Sir Robert Davis, who is chairman and managing director of Siebe, Gorman & Co., Ltd. The book is in two parts. Part I contains the technical portions, while Part II comprises a history of diving, accounts of diving for salvage and treasure, and many other diving adventures. The previous edition having been published in 1935, much new material has now been incorporated to take account of developments in diving made in the intervening period. In particular, a special chapter describes the diving equipment used for underwater warfare in the last war, including the suits worn by "frogmen" and others.

The Merchant Schooners, Vol. I. by Basil Greenhill. (Percival Marshall & Co., Ltd., 23 Great Queen Street, London, W.C.2. Price, 30s. net.)

In the years since the eclipse of the sailing ship as a carrier of cargoes, much work has been done and many books written in order to ensure that this chapter in sea transport should not close unrecorded. Different classes of ship have had their own chroniclers: mention may be made of Basil Lubbock's work for the clipper ship and Frank Carr's for the Thames barge. Until now, however, little or nothing has been written about one of the most interesting of all the groups of sailing ships, the West Country schooners which were built in and manned and operated from the ports of Devon and Cornwall.

Mr. Greenhill's book goes a long way towards rectifying this position. His present volume, which is to be followed by a second, gives a very complete and attractively written account of the evolution of the West Country schooners, of the yards in which they were built, the groups of people that owned them and the men that manned them. These small ships—many of them were under 100 ft. in length—began as carriers of fruit from the Mediterranean. By the end of the 19th century they were bringing cargoes of Newfoundland cod across the Atlantic, a trade which continued until well after the First World War, when the last of them took to the trade round the British Isles.

Many of them were exceptionally pretty ships, and this can be seen from the fine collection of photographs which, with plans, drawings and sketches by Roger Finch and David R. MacGregor, illustrate the book. The way in which they were able to cross the Atlantic in all weathers, often making very fast crossings, shows that they were also fine sea boats. Mr. Greenhill has collected together an extraordinary amount of detailed information, and has presented it all without in any way detracting from the readability of the book, as is all too easy to do.

The current issue of the *Bulletin* of the Compagnie Générale Transatlantique contains a tribute to Joffroy D'Abbas, the French engineer who applied steam successfully to navigation, 20 years before Fulton, when in 1783 he travelled up the Saône in the *Pyroscaphe*, a vessel 45 metres long, driven by means of a steam pump.

Newspaper readers will welcome the 1952 edition of the *Daily Mail Year Book*, which contains just the facts and figures needed to appreciate the day to day happenings at home and abroad. Sir Archibald Hurd contributes an article entitled "Our Shipping Peril," in which he discusses the influence of the present taxation on the efforts of owners to keep their fleets modern and efficient. Mr. David Williamson, the editor, it is to be congratulated on producing yet another brilliant issue of this essential reference book (1s. 6d. net).

San Francisco Bay Ports

Report of Senate Fact-Finding Committee

THE final report of the Senate Fact-Finding Committee on San Francisco Bay Ports has now been published by the California Legislature. It is an informative volume of some 600 pages, packed with facts and figures regarding the history, economic background, facilities, trade and traffic, and administration and finance of the several ports in the San Francisco Bay area. The Committee's study was undertaken to determine whether or not some form of cooperative plan and agency would serve to benefit the individual ports and the economic prosperity of the region. The Committee found in favour of such an agency, and in fact the new San Francisco Bay Ports Commission has already been established.

The report states that in spite of the excellence of the harbour and its ability to handle many types of tonnage, the ports on San Francisco Bay have been losing ground. In 1949 shipments of dry cargo moving in and out of the Golden Gate were 2,500,000 tons short of the 1925-40 average, and the decline has been chiefly in coastwise and inter-coastal cargoes. One of the reasons for this is the un-economic rates quoted by the railways for competitive traffic. Nevertheless, the harbour is not fully competitive with other major United States harbour regions. Traffic promotion, trade development and rate protection are regarded as the three prime factors in maintaining a competitive port position. The revival of the coastwise and intercoastal trades are contingent primarily on the solution of two problems: (1) a more equitable rate treatment, and (2) the reduction of operating costs. The Bay area, too, has had a long history of maritime strikes, and a cooperative plan to support the long-term stabilisation of port and maritime industrial relations would do much to assure the security of commerce.

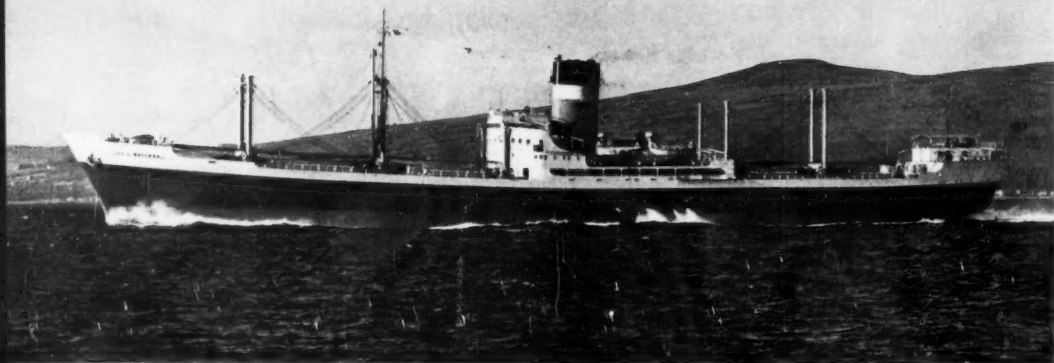
Cargo Handling Equipment

Although the existing port facilities are considered to be ample to meet the flow of cargo on a quantitative basis, except in a great emergency, the same is not true on a qualitative basis. A substantial part of the facilities was built before the increase in trucking services to the area and, despite some modernisation, many wharves are in need of repair. In addition, other factors impede the flow of commerce: increased cargo-handling costs; costly delays due to traffic congestion; the apparent need for additional mechanical handling equipment and certain bulk loading facilities. Furthermore, equitable and competitive wharfage and terminal rates are needed to attract more shipping to the area. The report emphasises that the primary tests of successful port operation today seem to be competitive shipping and cargo-handling costs; regular and uninterrupted schedules for steamship services; and efficient, economical delivery of cargoes from shipper to consignee. "Without minimising the value of up-to-date port facilities, modernisation of such facilities becomes an important factor only insofar as costs of freight movement are affected by outmoded piers, wharves and loading equipment."

The Committee therefore supported the plan for the setting up of a statutory port body for the San Francisco Bay area, empowered to work with existing public and private agencies and interests for the promotion of port facilities and services, in traffic and trade promotion, and in other economic activities related to the effective movement of cargo and passengers. The new Ports Commission, however, should not encroach on the basic autonomies of public ports and private terminal facilities, but should provide a constructive plan for the benefit of all the area port communities.

International Cargo Handling Coordination Association

Members of the executive committee of the International Cargo Handling Coordination Association met in Paris recently, when the draft constitution was finally approved. The first annual general meeting, at which a selection of appropriate technical papers will be read, will be held in Rotterdam probably in April. The appointment was announced of M. Georges Hecquet as president of the French section and of Rear Admiral (E) A. P. L. Mark Wardlaw as president of the executive committee. Mr. A. C. Hardy as chief coordinator and Mr. Meldrum as secretary to be located in the new offices of the Association at 39 Wilton Road, London, S.W.1. The Association is now in full operation and members are invited to send their problems to the headquarters of the Association from which, from time to time, bulletins will be issued in which brief information will be given of the latest developments in all aspects concerning the handling of cargo in and near ports.



CARGO LINER "CITY OF BRISBANE"

BUILT FOR ELLERMAN LINES BY CAMMELL LAIRD

THE cargo liner *City of Brisbane*, which has recently been completed by Cammell Laird & Co., Ltd., for Ellerman Lines, Ltd., is one of two similar ships which have been under construction for the Ellerman & Bucknall Steamship Co., Ltd. The other, the *City of Winchester*, is being built by Wm. Denny & Bros., Ltd., Dumbarton.

The *City of Brisbane* is a turbine-driven steamship of some 10,600 tons gross. Her leading particulars are as follows:

Length b.p.	520 ft.
Breadth moulded	71 ft.
Depth moulded to shelter deck	45 ft.
Loaded draught	29 ft. 7 in.
Tonnage:	
Gross	10,595.69
Net	6,087.80
Deadweight (on loaded draught of 29 ft. 8½ in.)	13,249

The ship has been constructed under Lloyd's Register Special Survey to Class 100 A1. She has three continuous decks, with forecastle, poop, and midships superstructure.

Her appearance is attractive, with a well defined sheer and well raked stem. Her mast and single large funnel have a slight rake. The latter, placed well forward on the midships deckhouse, carries the well known Ellerman colours. As no passengers are carried, this deckhouse is comparatively low, and this emphasises the height of the funnel.

The double bottom is divided into eight compartments, five of which carry oil fuel or water ballast, one for water, one domestic fresh water and one water ballast. There are five main holds, three forward and two aft. A deep tank is fitted between Nos. 2 and 3 holds, while oil fuel is carried in a cross bunker between No. 3 hold and the boiler room. Oil fuel is also carried in wing tanks abreast the boiler room and in a tank between the engine room and No. 4 hold.

Cargo Arrangements

No. 3 hold and Nos. 2 and 4 upper and main tween-decks are insulated for the carriage or refrigerated cargo. Insulated store rooms are also provided for ship's stores. Part of No. 5 tween-deck is fitted for bonded cargo. The remaining cargo space is used for the carriage of general cargo, and the deep tank forward is also available for this purpose, being loaded through No. 3 hatch. Part of No. 4 hold is fitted as a tank, and can be used either for general cargo or water ballast. The hatch covers are of wood, on sliding webs.

Cargo is handled by an outfit of 16 derricks of seven and 10 tons capacity. There are 16 electric winches,

of five tons capacity. In addition there is a 20-ton heavy-lift derrick on the foremast, which has been designed to take a 50-ton derrick if this should be required later.

The accommodation in the *City of Brisbane* conforms to the usual high standards of the owners. For a cargo liner, it may be considered more than usually extensive. Details are shown in the accompanying general arrangement drawings. The captain has a suite on the lower bridge level, consisting of a large dayroom, a bedroom and a bathroom. There is also a pilot's cabin on this deck. The captain also has a sea cabin on the navigating bridge deck above. This feature, although almost universal in warships, is not common in the Merchant Navy.

Extensive Accommodation

The deck officers have their cabins on the boat deck level. Here there are cabins for the chief, 2nd, 3rd and 4th officers, radio officer and two cadets. A well-fitted smoke room is provided for the officers on this deck, and in addition the cadets have a small study—another feature not very often seen. Aft of the boiler casing on this level is a ship's office and a tally clerk's office.

Engineer officers are accommodated one deck lower, on the shelter deck. Here the chief engineer has a suite, and there are cabins for the other seven engineers, a chief and second refrigerating engineer and two electricians, as well as the chief steward and a ship's doctor. The doctor has a hospital as well as a small surgery. The officers' galley is large, and has a coal-fired Esse range. There is a dining saloon at the forward end of the deckhouse, and in addition the engineers have a mess room and pantry.

The petty officers are accommodated in the tween-decks amidships, on the starboard side, where there are double cabins for the six quartermasters and a cabin for the carpenter. A mess and pantry is provided. The remainder of the crew, which is Indian, is housed in the poop. Here the two serangs have single-berth cabins, the seamen and foremen six and seven-berth cabins, and the stewards a ten-berth cabin. Two cooks share a cabin. There are separate messes and washplaces for seamen, firemen and stewards.

The radio office is on the navigating bridge level. A separate radar room is provided, with a work bench and stowage for spares, and there is also a battery room on the deck beneath. A modern system of mechanical ventilation and heating is provided throughout the accommodation, capable of maintaining a com-

fortable temperature in all rooms in the coldest working conditions likely to be experienced in service.

Four wooden lifeboats, one of them a motor boat, are carried under gravity davits. The steering gear is of the four-ram electro-hydraulic type, controlled by telemotor from the navigating bridge or by emergency hand control from aft.

The ship's radio equipment, supplied by Marconi, consists of a medium and short wave transmitter, with two receivers. An auto alarm is fitted. Radio aids to navigation include a direction finder and echo sounding equipment. The scanner of the Cossor radar set is mounted on top of the funnel, from which position it has an all-round view obstructed only by the foremast. It is about 90 ft. above the water. Marconi sound reproducing equipment is fitted, with five loudspeakers.

Main Propelling Machinery

The propelling machinery comprises one set of three cylinder turbines driving a single screw through articulated double reduction gearing. The service power is 13,000 s.h.p. at 112½ r.p.m. The two impulse astern turbines give a total astern power of 7,800 s.h.p. The high pressure ahead turbine has impulse blading, while the intermediate pressure and low pressure ahead turbines are of the reaction type, the latter being double flow. The regenerative condenser is designed to maintain 28 in. of vacuum with sea water temperature of 85 deg. F.

The two main boilers are of Babcock & Wilcox single-pass sectional type, with interdeck superheaters and water wall furnace backs. Surface type atomizers are fitted to permit superheat control. The boilers are, of course, arranged to burn fuel oil under forced draught only. The normal evaporation of each boiler

is 65,000 lb. per hour at 150 lb. per sq. in. (gauge) and 750 deg. F. temperature at the superheater outlet.

There are two 300 kW, 220 volts D.C., turbo-generators fitted, each with a self contained condensing plant. One of these plants is sufficient for all requirements at sea. For use in harbour when the main boilers are shut down there are two 300 kW diesel generators, and one 10 kW diesel generator for standby use. A Cochran auxiliary boiler is provided for port use.

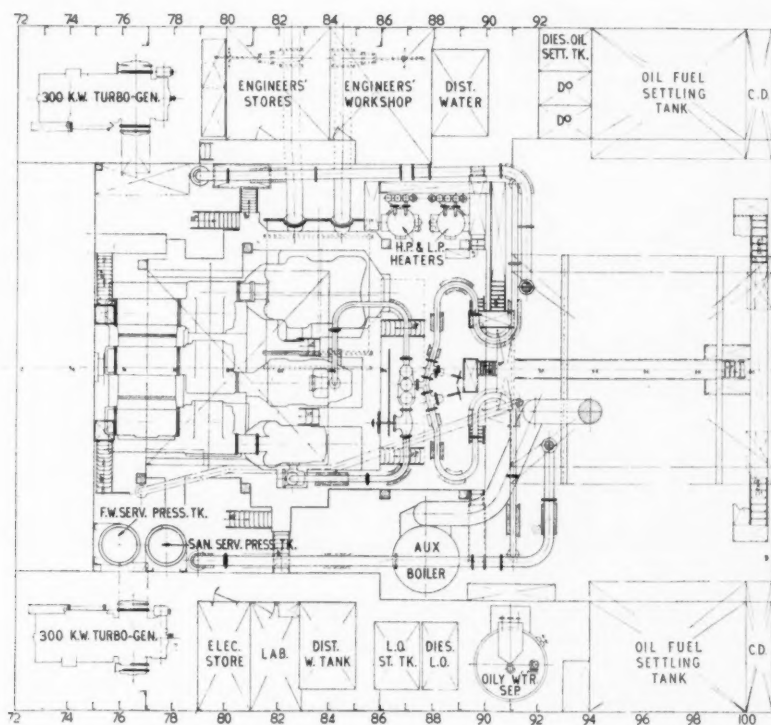
The manganese bronze propeller is 20 ft. 6 in. in diameter, and weighs 24 tons. A Weir closed feed system is installed, arranged to give a final feed temperature of 320 deg. F. All auxiliary machinery is electrically driven with the exception of the main and auxiliary feed pumps. A steam to steam generator supplies auxiliary steam at 125 lb. per sq. in. (gauge) for fuel heating, etc. The feed system of this generator is completely isolated from the main feed water, to prevent any danger of contamination.

Evaporating Plant

Special attention has been paid to the evaporating plant. To minimise priming and sealing the evaporator output has been fixed at 20 tons per day, with an extra large coil surface of 134 sq. ft. Bled steam at 40 lb. per sq. in. (absolute) will normally be used in the coils at sea. Alternatively, desuperheated steam at 125 lb. per sq. in. (gauge) can be used, when the output can be stepped up if necessary to 30 tons per day. The double distillation of the main boiler feed make up is carried out in the steam to steam generator, the vapour being condensed in the main H.P. feed heater.

The fresh and sanitary water systems are of the

Plan of engine room
in the
"City of Brisbane"



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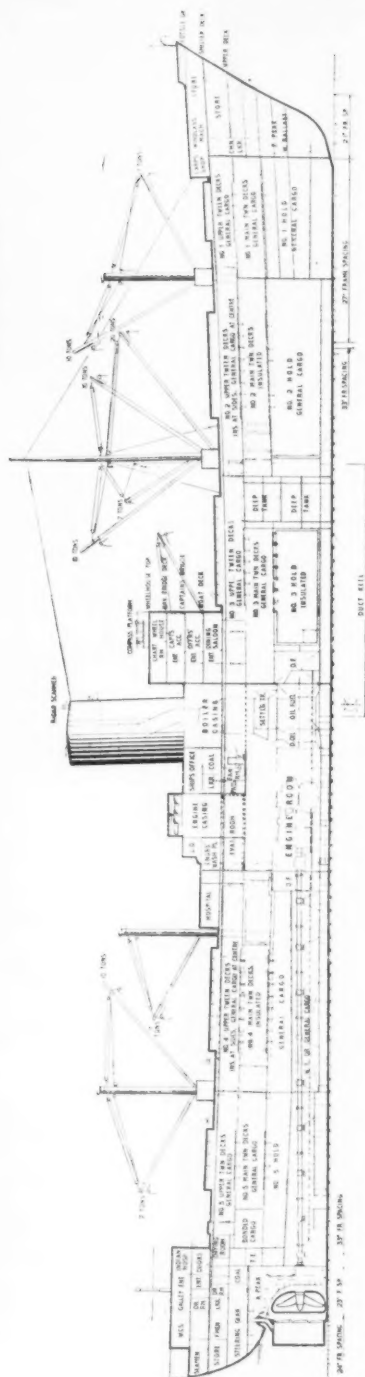
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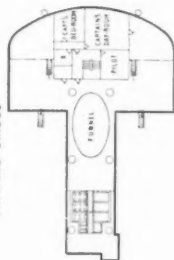
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DOCKING BRIDGE



CAPTAIN'S BRIDGE



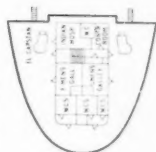
NAVIGATING BRIDGE



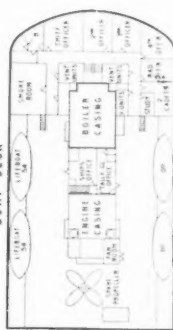
WHEELHOUSE TOP



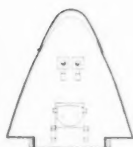
POOP DECK



BOAT DECK



FORECASTLE DECK



SHELTER DECK

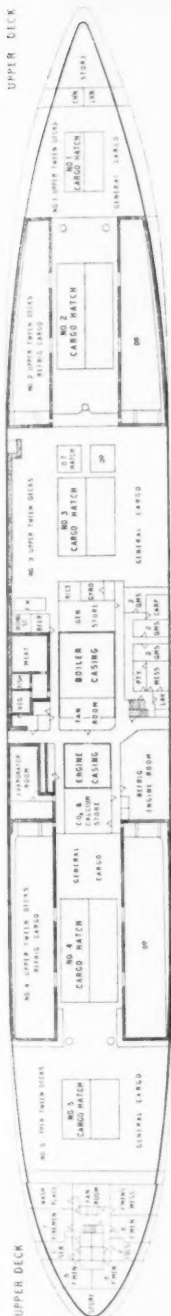
SHELTER DECK





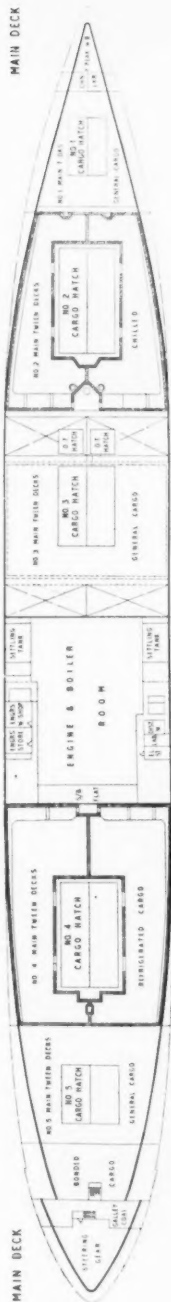
UPPER DECK

UPPER DECK

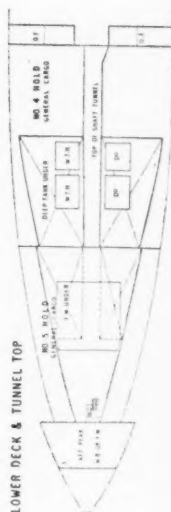


MAIN DECK

MAIN DECK



LOWER DECK & TUNNEL TOP



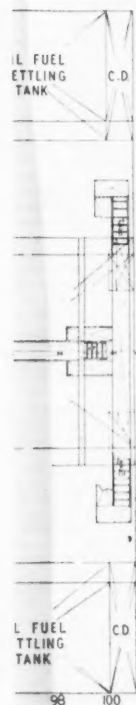
General arrangement of the singlescrew turbine steamship "City of Brisbane",
built by Cammell Laird & Co., Ltd., Birkenhead, for Ellerman Lines, Ltd.

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CA

THE cargo liner has been completed by Ellerman Lines, Ltd. have been under Bucknall Steamship Winchester, is built at Dumbarton.

The *City of Brisbane* some 10,600 tons as follows:

Length b.p.	...
Breadth moulded	...
Depth moulded to	...
Loaded draught	...
Tonnage	...
Gross	...
Net	...
Deadweight	...
(on loaded draught)	...

The ship has been Special Survey to tinuous decks, with superstructure.

Her appearance sheer and well rak funnel have a sl forward on the known Ellerman this deckhouse is this the height of

The double bottomments, five of which one feed water, on ballast. There are two aft. A deep holds, while oil fuel No. 3 hold and the in wing tanks are between the engine

No. 3 hold and decks are insulated cargo. Insulated ship's stores. Pa bonded cargo. The the carriage of goods ward is also available through No. 3 hold a tank, and can water ballast. The sliding webs.

Cargo is handled and 10 tons capacity

BOAT DECK

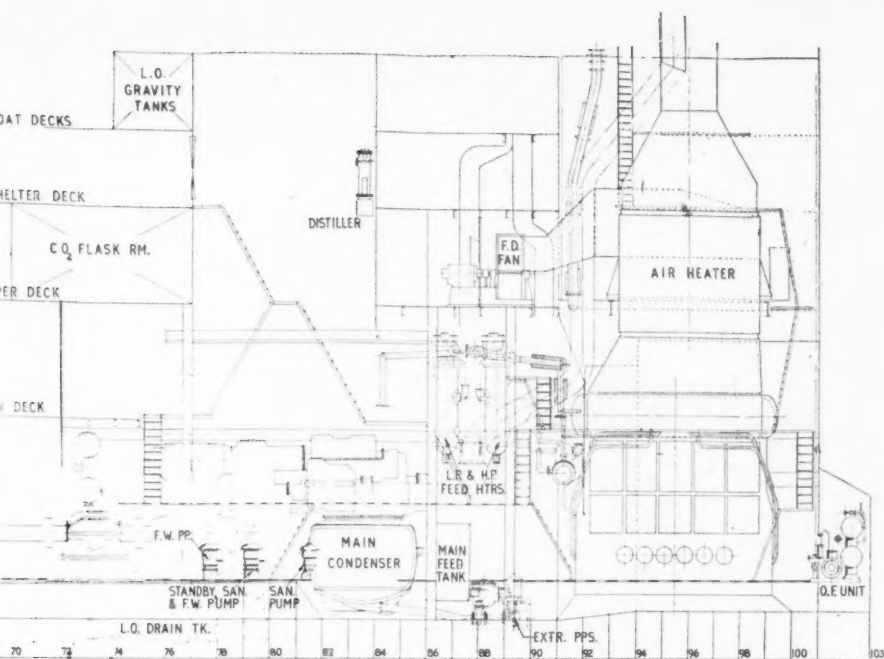
SHELTER

UPPER DECK

MAIN DECK

66 70

Machinery arrangement of the turbine steamship "City of Brisbane"



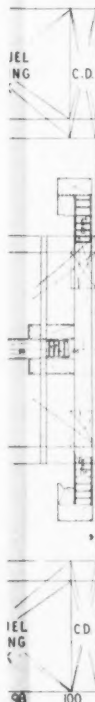
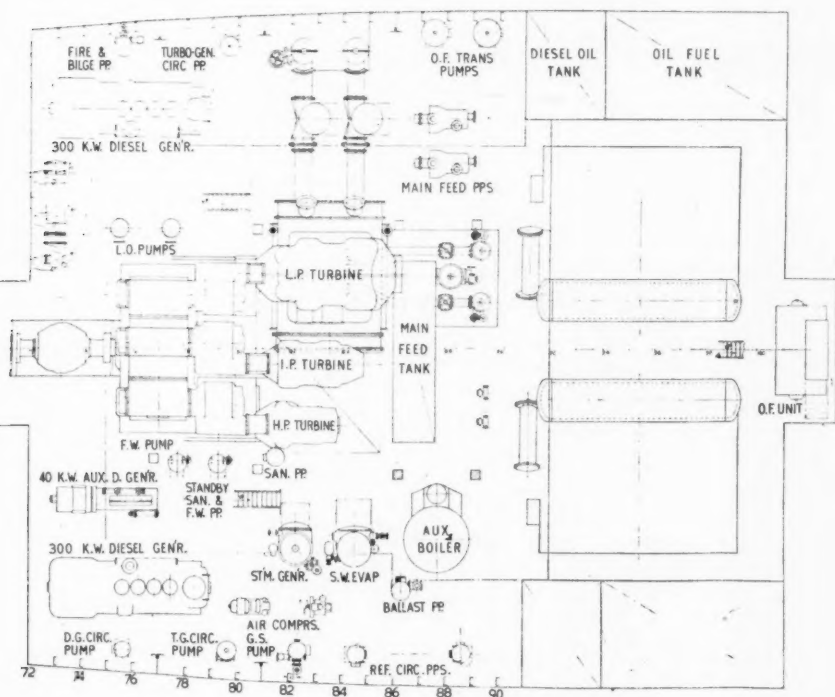
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C., turbo-condensing all require the main kW diesel for standby ed for port

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evaporating evaporator y, with an d steam at he used in en steam at en the out- 10 tons per boiler feed a generator, H.P. feed

are of the



automatically controlled pressure type. There are three 20-ton centrifugal pumps, one fresh water, one sanitary and one standby for both services. Two pumps are provided for the circulation of the main condenser. There are also one 300-ton ballast pump, one general service and one fire and bilge pump of 135 tons each and two 60-ton fuel transfer pumps.

King George's Fund for Sailors

At a meeting of the General Council of King George's Fund for Sailors, presided over by the president, Earl Mountbatten of Burma, it was reported that the income up to November 30, 1951, was £227,361. Admiral Sir William G. Tennant, chairman of the Royal Navy Distribution Committee, recommended grants amounting to £61,970, making, with £32,011 previously allocated, a grand total of £93,981. Sir Richard Suedden, chairman of the Merchant Navy Distribution Committee, recommended grants amounting to £60,913, making, with £61,834 previously allocated, a grand total for the year of £122,747 to societies dealing with the Merchant Navy and fishing fleets. The Lord Mayor of London, Admiral of the Fleet Lord Fraser of North Cape and Admiral Sir R. L. Burnett were nominated for appointment as vice-presidents.

Shipping in Brazil

The *Fortnightly Review* issued by the Bank of London & South America records that President Vargas has authorised, for a period of six months, the transport by foreign ships of meat and other foodstuffs awaiting shipment from Rio Grande do Sul to the larger centres of consumption, such as Rio de Janeiro and São Paulo. The head of the Rio de Janeiro Port Administration recently stated that part of the new Praça Mauá pier would be ready for use in December. This pier, which is 400 metres long and 80 metres wide, has been under construction since 1949, and when completed will be able to take six medium-sized vessels. On November 28 there were 18 ships awaiting berths at Rio de Janeiro, the first in line having arrived on November 14. The partial use of the new pier should relieve the present port congestion to a considerable extent. The Brazilian Government has placed orders in the Netherlands for the construction of six tugs, at a total cost of 5 million florins.

Metalock (Britain), Limited

Metalock (Britain), Ltd., the British subsidiary of the American cold repair process company, recently completed its thousandth repair job. When Major Edward C. Peckham, chairman and managing director of the British company, first brought the cold repair process from Canada four years ago and established the London office, he had a staff of one. There are now a large administrative staff and 50 trained Metalock operators, who are sent daily to any part of the world to repair shipping and industrial machinery on the spot. The repair carried out in the *Esso Hull* was to one of the two main oil cargo pumps, and was undertaken during the trip from Hull to Southampton, a voyage of 36 hours. Among other recent repairs undertaken by the British company was the repair of a 1½-in. fracture on a circulating pump engine casting in the *Sun Amado*. The work was completed in one day. A 4-in. fracture on the diesel head of a Paxman generator in the cable ship *Monarch* was also repaired in a day.

Salvage of Tanker at Colombo

The derelict tanker *Soli*, sunk by Japanese bombs in Colombo harbour during the war, is now being raised from the sea by an Italian salvage crew. The Italians, representing the firm of D. Trinovich & Company, Trieste, who will receive Rs.780,750 from the Ceylon Government for the work, will tow the wreck outside Colombo harbour and sink it. The presence of the wreck in the harbour is impeding the construction of the new oil dock under the port development scheme. The wreck must be sunk before December—within six months of the date when the Government called for tenders for the removal of the wreck, according to the agreement.

THE GERMAN trawler fleet on December 1 comprised 234 vessels of a total of 98,962 tons gross, a reduction of 139 vessels on the 1939 total.



Dock Lighting for Singapore Harbour Board

Lighting was given high priority among the reconstruction and improvement works undertaken by the Singapore Harbour Board after the war. Very little of the previous installation remained at the end of the Japanese occupation, and the amount of pilfering that went on in the docks at that time necessitated immediate improvement of the lighting. The work has extended over several years in step with the erection of new buildings in the dock area, and has recently been completed. All the lighting equipment was supplied through the Singapore branch of the General Electric Co., Ltd., which collaborated in the installation with the Electrical Department of the Singapore Harbour Board.

All the main lighting is by means of 400-watts mercury lamps in G.E.C. lanterns with bowl diffractors. New top brackets were made for the lattice steel standards of the



Night view of wharf lighting in front of the new godowns

previous installation, giving a mounting height for the lanterns of about 30 ft. On the wharf itself these standards were spaced about 200 ft. apart, so that there is one at each end of all the godowns remaining from the prewar installation. Several new godowns have been built, and for these new brackets attached to the godown eaves have been provided for mounting the lanterns. The new godowns are about 340 ft. long, so that three brackets are mounted on each with a spacing of about 175 ft., two being at the ends and one in the centre. The height of the lanterns above the wharf is about 25 ft. There are approach lanes to the wharf between each block of godowns, and all brackets at the ends of the buildings, both on the lattice posts and on the godowns themselves, are at an angle of 45 deg. to the wharf so that the lanterns serve the approach lanes as well as the wharf area.

The Bombay port authorities have placed orders for the supply of 30 electric level-luffing wharf cranes for the Alexandra docks with a Calcutta firm of engineers. This is the first step towards the conversion of dock cranes from hydraulic to electric operation in Bombay, and the cranes will cost about Rs.7,000,000. This is the first time that level-luffing cranes for an Indian port will be built in India. Of the cranes to be built for the Alexandra docks, 24 will be of 3-ton capacity and the rest of 6-ton capacity.



the *Clarke, Chapman*

{ Gastight SUEZ CANAL Searchlight Projector

We have recently developed a Gastight Searchlight Projector which has been officially approved by the Suez Canal authorities for the use of Tankers when navigating the Suez Canal. An important feature of the searchlight is the fitting of a "Brytal" Aluminium split reflector, which is virtually unbreakable, developed during the last war to withstand the arduous conditions of Naval Service. It has an optical performance comparable to silvered glass and offers complete resistance to shock and marine corrosion. A spill shield inside the Projector reduces stray light or halo to the absolute minimum.

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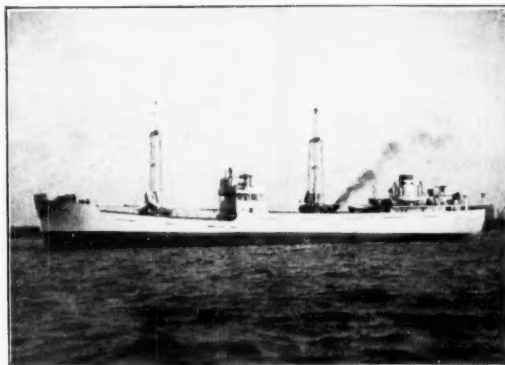
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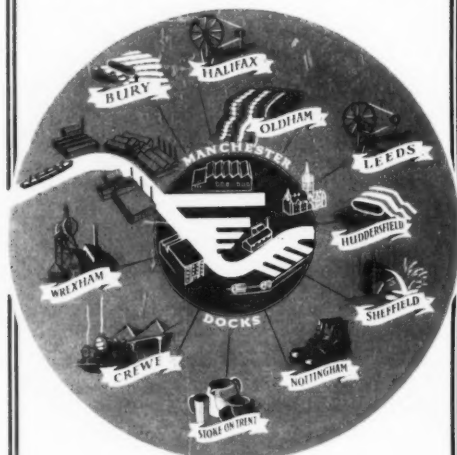
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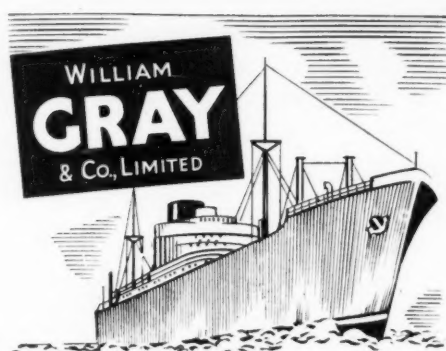
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THE "THERMCO" BOILER FEED SYSTEM

A WATER FEEDING SYSTEM DESIGNED TO AVOID CORROSION AND PITTING

By a Special Correspondent

THE VARIOUS defects to which marine boilers may be subject can sometimes form a considerable item in ship maintenance costs. This may add not only to the already inflated costs of running a ship, but because of the delays thus caused, may also greatly reduce earning power. Two of the principal troubles found in marine boilers are the corrosion and pitting of tubes, furnace plates, water space stays, combustion chamber plates, rivet heads and other steel parts in the water space of boilers. Grave concern has been expressed in recent years regarding the rapid deterioration of tubes in multitubular boilers, a phenomenon associated with the present practice of making boiler tubes only in steel, instead of, as in the past, in good wrought iron. One firm of boiler makers with considerable experience in carrying out repairs to ships' boilers which have been affected by corrosion and pitting has reported that whereas wrought iron tubes had a lifetime of from 20 to 30 years, steel tubes of modern type had been known to have a life of only from two to seven years, while in a few cases steel tubes have had to be replaced after only three to nine months' service.

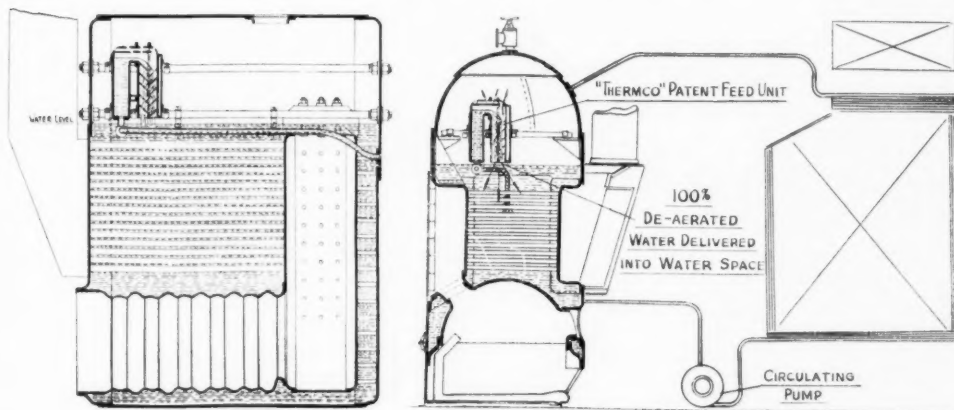
It is now believed that this rapid tube corrosion is caused principally by the dissolved oxygen and carbon dioxide in the feedwater entering the boiler. Tests have shown that it is possible to remove dissolved oxygen and carbon dioxide from the water by bringing the feed up to the boiling point corresponding to the pressure at which it is being evaporated. It is a natural law that every boiler pressure has a corresponding temperature. Water at atmospheric pressure boils at 212 deg. F.; at 50 lb. pressure it boils at 297 deg. F.; at 100 lb. pressure at 338 deg. F.; and at 180 lb. pressure at 380 deg. F. (decimals omitted). In the latter case, if the feed water entering the boiler and delivered into the water space of the boiler has a temperature of 200 deg. F., this means that the heating surfaces, namely, tubes, furnaces, and combustion chambers, impart to the water at that temperature the sensible heat required to raise the temperature to 380 deg. F. In this operation of raising the temperature of the feed water from 200 deg. F. to 380 deg. F., the dissolved oxygen and carbon dioxide are driven off and attack the tubes, furnace plates and other steel parts in the water space, so causing corrosion and pitting.

From the earliest use of steam boilers the method of

introducing the feed water has been to pump the feed into the solid body of water in the water space of the boiler, because if this is not done violent concussions can take place, causing damage to check valves and feed water pipes. It seems obvious that steps should be taken to ensure that the feed water before entering the water space of the boiler should have the dissolved oxygen and carbon dioxide removed and efforts have been made to do this with various types of apparatus in the engine room and by methods of treatment of the feed water. After some research and practical experiments, it has been decided by McMaster, Lyle & McMaster, of Belfast, that the most efficient and economic automatic method of achieving the desired objective was to do it inside the boiler but not in the water space, and it has been from that stage that the development of their "Thermco" patented system of boiler feed for marine boilers has been made.

Method of Operation

In the Thermco system, the feed water is not pumped into the solid body of water in the water space of the boiler but into the steam space, by passing it through the Thermco unit. This is made possible by incorporating in the unit a receiver which provides the solid body of water required to prevent concussion. The operation of the Thermco unit is shown in an accompanying diagram. The feed water entering the boiler passes through the internal feed pipe (either main or auxiliary feed) connected to the receiver of the Thermco unit and it rises slowly up the receiver, because the ratio of area of the receiver to the feed pipe is approximately 50 square inches to 3½ square inches. When the feed water reaches the outlet of the receiver it overflows into the tray chamber and in descending in the tray chamber it is broken up into a spray, instantly heated up to the evaporation temperature in the tray chamber. All the dissolved oxygen and carbon dioxide leave the feed water, which is then discharged on to the level of the water in the water space of the boiler. The dissolved oxygen and carbon dioxide rise in the tray chamber and escape into the steam space through suitable vents. The dissolved oxygen and carbon dioxide are absolutely harmless in the steam space of the boiler and pass out of the boiler with the steam. With the Thermco patent feed unit in



The patent feed unit in operation

A "Thermco" unit serving both Cochran and Lamont boilers

operation it is impossible for dissolved oxygen and carbon dioxide to enter the water space of the boiler.

This patented system has now been fitted to ships with boilers of several different types and as a result of experiments and service reports the makers have issued a statement as the practical effects of using their Thermo unit. It is reported that not only were corrosion and pitting completely eliminated but already affected parts were cleaned up. Instead of a hard scale developing on the heating surfaces, it has been found that minerals in the feed water are deposited in the bottom of the boiler in the form of sludge, while existing hard scale broke off and also collected at the bottom of the boiler. Unequal expansion and corresponding stresses in the boiler are avoided by the introduction of water at the temperature of evaporation. Any oil passed through with the feed water can be removed by using the scum cock, it being impossible for oil to reach the furnaces, tubes or combustion chamber plates with the Thermo system. Quicker heat transference in the boiler is also obtained, practical tests having shown that with this method of feeding into the boiler, there is one per cent saving in fuel for every 20 deg. F. difference normally existing between the temperatures of feed water entering the boiler and of the water in the water space. The time taken to raise steam is also decreased, while it is claimed that the cost of repairs inside the boiler is reduced by 75 per cent when using the Thermo system.

RECENT PUBLICATIONS

No. 146 of *Crossley Chronicles* describes and illustrates the production of high quality ferrous and non-ferrous castings in the new Oosnshaw foundry of Crossley Bros., Ltd.

The British Rubber Development Board has produced a booklet describing the various uses of rubber in yachts and small craft.

The December issue of *The New Shipway*, published by Saunders Roe, Ltd., deals principally with the progress of the new Princess flying boat.

The winter 1951 issue of the *Hunting Grouse Review* contains an interesting account of the maiden voyage of the tanker *Laganfield* by her master, Capt. M. Manthorpe.

A booklet has been produced by Harris & Dixon, Ltd., giving brief histories of the company and its subsidiaries and representative companies, and supplying details of the business conducted by each company. A frontispiece to the booklet is a reproduction of a contemporary painting of the three-masted schooner rigged steamer *Keanon Hall*, built by Palmer's, Newcastle-on-Tyne, for Dixon & Harris in 1870. Harris & Dixon has been in continuous existence since 1797.

A review of the problems of engineering training is given in a monograph entitled "Selection, Training and Education for Technical, Supervisory and Managerial Staffs in the Engineering Industry," published by the British Engineers' Association. A special section is devoted to those training problems which particularly affect the smaller companies. A number of interesting appendices are contained in the booklet, including a short bibliography of the important reports on training and education for technical and supervisory posts in industry. Copies of the publication can be obtained from the Association, price 2s. each.

A comprehensive catalogue in colour has recently been produced by R. A. Lister (Marine Sales), Ltd., describing the Blackstone range of marine diesel engines Types EVM and EYSM. The catalogue, which is in many ways a model of its kind, contains a principal section in full colour in which the principal features of these engines are attractively illustrated and explained, together with a section giving technical data.

Leigh Forebrace writes in the *P.L.A. Monthly* for December: "There seems to be a definite swing from the diesel engine of the motorship to the turbine of the steamship for certain types of vessels, and in this respect the Clan Line have recently altered their original building programme of five motor ships and one turbine steamer to three motor ships and three turbines. During the period between the two world wars there was a marked tendency for shipowners to change from steam to diesel propulsion; it may be that the advance in boiler design is to a large extent responsible for this apparent partial return to the steam turbine."

ROUND THE SHIPYARDS

Work in Progress on the North East Coast

By THE SHIPPING WORLD'S Own Correspondent

A YEAR of great achievement on the North East Coast is ending with the gratifying launching output of 93 ships, totalling 623,580 tons gross. This is an increase in tonnage over the 1950 figure of 73,810 tons gross, though the number of ships built has decreased by three. The output is good, especially considering that there was only one launch from Blyth, and the South Shields firm of John Readhead & Sons, Ltd., did not have their first launch until August.

With the Tyne providing four launches in recent weeks, the river's output is 239,700 tons gross, the highest figure since 1930. The figure includes small coasters, barges, lighters, etc., and excluding these craft 21 seagoing vessels of 234,599 tons gross have left the stocks of the four Tyne yards. New tanker tonnage has dominated the programme with 12 ships of 162,130 tons gross, including five of 72,600 tons for export. Three of the four recent launches have been of the tanker class. Apart from launching activity Tyne yards have been busy at the fitting-out quays and four ships have recently left the river. The Tyne delivery output for the year is 19 ocean-going vessels of 207,975 tons gross, against the 1950 total of 23 ships of 206,505 tons gross.

The last launch of the year from the yard of Swan, Hunter & Wigham Richardson, Ltd., was that of the 11,250 tons gross tanker *Scottish Lion*, building for the Scottish Tanker Co., Ltd. A sister ship, the *Scottish Eagle*, will also be built by the same builders, who during the year launched nine vessels of 98,793 tons gross, including six tankers of 75,930 tons. Across the river at the yard of R. & W. Hawthorn, Leslie & Co., Ltd., the 12,400 tons gross tanker *Clutha River* for the order of the British Empire Steam Navigation Co., Ltd., left the stocks. The builders' 1951 launching output of four ships of 51,640 tons gross shows an increase of about 9,000 tons gross over the previous year. With an output of 67,412 tons gross the Walker firm of Vickers-Armstrongs, Ltd., also reports an improvement compared with 1950. The Walker launching programme was completed with two December launches, the first being the 8,300 tons gross cargo liner *Aleinous* for Alfred Holt & Company. The second launch at the Walker yard will be on December 28, when the tanker *Saxondale* will leave the stocks. A sister ship, the *Saxonglade*, is at present fitting out at the same yard.

High Output from the Wear

The South Shields firm of John Readhead & Sons, Ltd., have launched their second ship of the year, the 7,800-ton gross cargo liner *Forester*, ordered by T. & J. Harrison, Ltd. The *Crofter*, a similar ship for the same owners, has recently been commissioned by the same builders. Other vessels commissioned from Tyne yards during the past few weeks include the Furness, Withy cargo liner *Pacific Reliance*, of 9,300 tons gross, built by Vickers-Armstrongs, Ltd. The 18,600 tons gross *British Bulldog*, one of six ships of similar tonnage ordered by the British Tanker Co., Ltd., has been completed by Swan, Hunter & Wigham Richardson, Ltd., and is the third ship delivered to the same owners by the Wallsend builders this year.

On the Wear two ships have left the stocks during the past month and the river's output for the year is 28 ships of 197,920 tons gross. This is the river's highest output for six years, though the number of vessels constructed is the lowest for 12 years. The increase in the size of vessels is reflected in the figures. One of the two launches was from the yard of Short Brothers, Ltd., the vessel being the 6,500 tons gross cargo ship *Barrington Court* for the United British Steamship Co., Ltd. The second launch is due on December 28 at the yard of Sir James Laing & Sons, Ltd., when the 10,000 tons gross tanker *London*

Endurance, the second of a series of three ships, will leave the stocks. The new tanker is for London & Overseas Freighters, Ltd., London. By the end of the year the Wear delivery output will have reached 33 ships of 228,880 tons gross, one of the best returns for some years. Already delivered this month was the 7,600 tons gross tanker *Surf Pioneer*, built by Bartram & Sons, Ltd. This ship was originally ordered by the Gdynia-America Shipping Lines, Ltd., but has been taken over by the Admiralty. A similar procedure was adopted with the sister ship *Surf Patrol*, delivered in July this year.

Tanker Halves Joined

One of the most interesting jobs in this area for many years is just about completed. It is the 15,226 tons gross Norwegian tanker *Rondeffell*, built by John Crown & Sons, Ltd., Sunderland, in two sections. The two halves have been joined together at the Middle Docks & Engineering Co., Ltd., yard at South Shields in the fine time of 32 days. The ship is now back in the Wear and is expected to be ready for service before the end of the year. Other scheduled Wear-built ships due for delivery this month include the 11,400 tons gross tanker *Charlton Venus*, the biggest ship to be built by William Doxford & Sons, Ltd. The new vessel is for the Charlton Steamship Co., Ltd. From the yard of Sir James Laing & Sons, Ltd., the 8,600 tons gross tanker *British Maple* will be one of the last ships of the year to be sent into service.

Though there has been a drop in the quantity of new tonnage ordered during the past month, contracts are still arriving. Orders are not difficult to book, but the question agitating the minds of shipbuilders is where the materials are coming from to construct the ships. Unless there is a change for the better it is feared that there will be some delay in the delivery of new tonnage. It is generally agreed that the supply position is becoming acute and there is much speculation as to the tonnage of steel which will be allocated.

New Cross-Channel Car Ferry

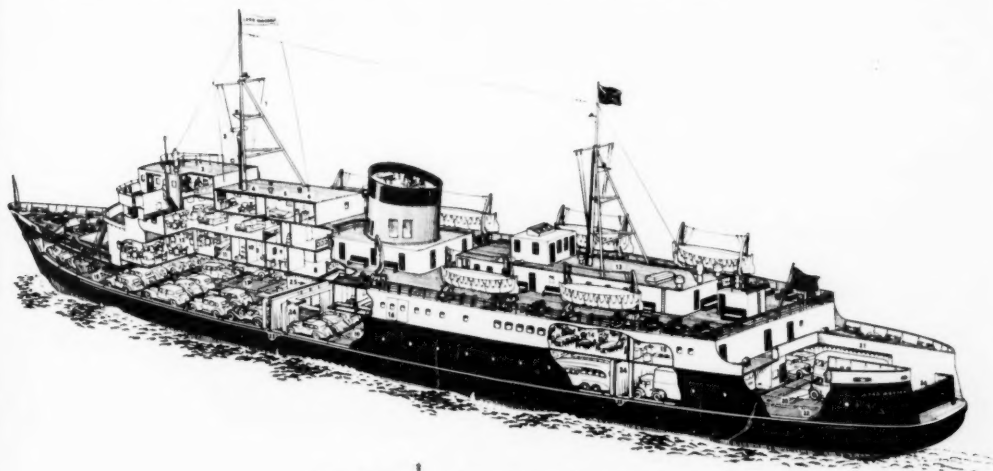
Launch of the Lord Warden

The turbine steamship *Lord Warden*, a passenger and motor car ferry of about 3,300 tons gross designed for the Dover-Boulogne service of British Railways, was launched on December 14 from the yard of William Denny & Bros., Ltd., Dumbarton. The naming ceremony was performed by Mrs. John Elliot, wife of the chairman of the Railway Executive. The *Lord Warden*, which is due to enter service next spring, provides garage space for 120 cars and accommodation for 700 passengers. A new ramp terminal is now under construction at Boulogne, which will enable motorists to drive on and off the ship; and a similar ramp which is to be built at Dover will probably be ready in 1953.

The *Lord Warden*, which will have a service speed of 20 knots, has an overall length of 361 ft. 6 in. and a beam of 59 ft. The main feature of the vessel is the garage, which occupies practically the whole of the main deck. Steel doors are provided at the stern which, when opened, allow cars to be driven directly on board over the loading ramps to be installed at the terminals. At the forward end of the main deck will be a turntable, allowing cars to be switched round and returned along one side of the garage ready to drive off. Thus "first on—first off" will be the rule. There is a clear deck height of 10 ft. 6 in. over the major portion of the garage, which will allow motor coaches to be accommodated, and at the aft end is a well in the promenade deck, so that a number of double-deck buses and high vehicles can also be carried.

The *Lord Warden* will have a smart and well proportioned appearance in conformity with the latest trends in cross-Channel steamship design. Passenger accommodation is arranged on the boat and promenade decks, and includes a full range of public rooms and private cabins. The restaurant seats 140 people. Modern navigation equipment includes radar, and an automatic sprinkler and fire alarm system protects passenger accommodation and the garage.

The sectional drawing reproduced below will give an excellent idea of the general arrangement of the *Lord Warden*. It will be seen that the vessel will have two tripod masts. The public accommodation includes lounge, smokeroom and buffet, as well as a dining saloon.



New Cross-Channel Car Ferry "Lord Warden"

Key to diagram

- | | | |
|-----------------------------------|---|---|
| 1. Tripod mast | 10. Gentlemen's toilet | 19. Midship sections of garage (54 cars) |
| 2. Radar scanner | 11. Buffet | 20. After section of garage (26 cars) |
| 3. Wheelhouse and chartroom | 12. Lounge | 21. Open well for high vehicles |
| 4. Captain's quarters | 13. Engineer officer's quarters | 22. Deck marking strips and securing fittings |
| 5. Chief officer's cabin | 14. Restaurant | 23. Forced ventilation ducts |
| 6. Radio officer's cabin | 15. Galley | 24. Fireproof curtains |
| 7. Smokeroom | 16. Gangway doors | 25. Door to stairway |
| 8. Forward vestibule and stairway | 17. Forward section of garage (40 cars) | 26. Loading ramp gates |
| 9. Passport office | 18. 16-ft. turntable for cars | |

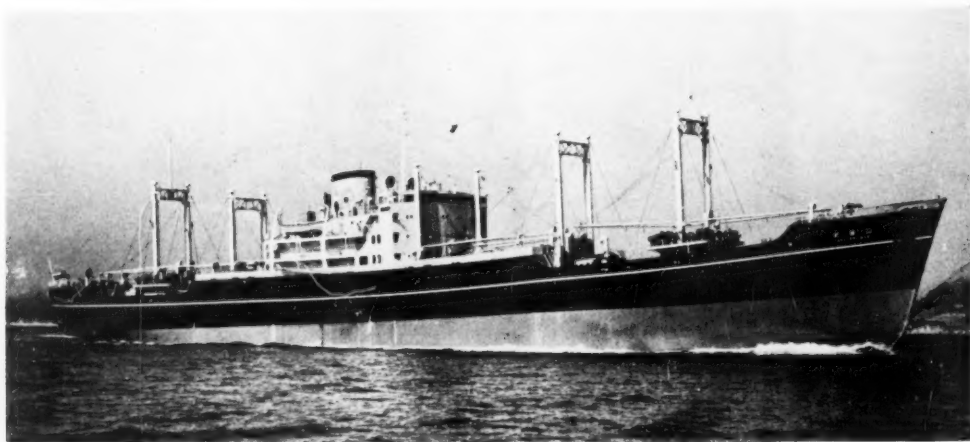
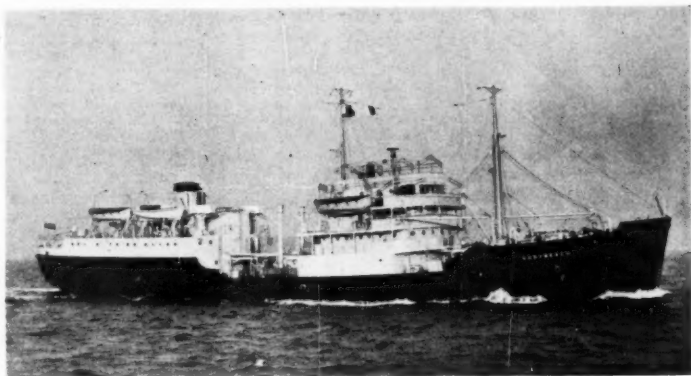


Cargo Motorship "Copsewood"

The *Copsewood*, the second of two sister ships built by the Burntisland Shipbuilding Co., Ltd., to the order of the Constantine Shipping Co., Ltd., has entered service. Designed for either coastwise or short-sea trading, the *Copsewood* is a single-screw cargo motorship of 1,272 tons gross and carries a deadweight of 1,675 tons on a draught of 15 ft. 8½ in. Her principal dimensions are 214 ft. 6 in. length b.p., 35 ft. 4 in. breadth moulded and 16 ft. depth moulded. There are three cargo holds served by large hatchways. No cargo-handling gear is carried except a 1-ton derrick at the forward hatch. The propelling machinery, supplied by British Polar Engines, Ltd., comprises a 4-cylinder two-stroke single-acting diesel engine, developing 640 b.h.p.

Fleet Tanker "Eddybeach"

Built to the order of the Naval Store Department of the Admiralty, the single-screw steam tanker *Eddybeach* has been completed by the Caledon Shipbuilding & Engineering Co., Ltd. Of 2,157 tons gross, she has dimensions of 286 ft. length o.a., 44 ft. breadth moulded and 18 ft. 6 in. depth moulded. She carries a deadweight of 2,095 tons on a draught of 17 ft. 2 in. The *Eddybeach* is fitted with a long poop, short bridge and forecastle, with store rooms provided in the bridge tweendecks. Her single screw is driven by a set of enclosed triple-expansion steam engines supplied by Lobnitz & Co., Ltd. The propelling machinery develops 1,750 i.h.p. at 227 r.p.m. and provides the vessel with a speed of 12 knots. A sister vessel to the *Eddybeach*, the *Eddybay*, was launched from the same yard on November 29



Japanese Cargo Motorship "Yamateru Maru"

Of 7,150 tons gross, the single-screw cargo motorship *Yamateru Maru* has been delivered to the Yamashita Steamship Co., Ltd., by the Innoshima yard of the Hitachi Shipbuilding & Engineering Co., Ltd. The vessel has a deadweight of 10,615 tons and dimensions of 134 m. (439.7 ft.) length, 18 m. (59.1 ft.) breadth, and 10.5 m. (34.5 ft.) depth. A service speed of 17 knots is maintained by a two-stroke single-acting B. & W.-type diesel engine developing 5,525 b.h.p. The engine was supplied by the Mitsui Shipbuilding & Engineering Company

NEW CONTRACTS

Yards in Great Britain and Northern Ireland

Shipowners	No. of Ships	Type	Approximate Tonnages		Dimensions (ft.)	Speed (knots)	Propelling Machinery	Total h.p.	Engine Builders	Shipbuilders
			Gross	Deadweight						
—	1	Coaster	140	—	85.5 (long)	—	Steam	200	Shipbuilders	W. J. Yarwood & Sons
—	1	Tug	105	—	70 (long)	—	Diesel	550	Crossley Bros.	W. J. Yarwood & Sons
—	2	Tugs	114 (each)	—	84 (long)	—	Diesel	605 (each)	Ruston & Hornsby	W. J. Yarwood & Sons
—	1	Barge	—	—	88 (long)	—	Non-propelled	—	—	W. J. Yarwood & Sons
Southampton, Isle of Wight & S. of England R.M.S.P. Co.	1	Tug	—	—	—	—	Tw-scr. steam	1,500	—	John I. Thornycroft
Adelaide S.S. Co., Adelaide	1	Tug	—	—	—	—	Steam	—	—	James Lamont
Klosters Rederi A/S, Oslo	1	Cargo	—	9,400	425 b.p.	13.25	4-cyl. Doxford diesel	—	N.E. Marine	Short Bros.
Eastern & Australian S.S. Co.	1	Cargo liner	—	10,000	58.75 37.75	14	Steam turbine	6,000	—	Barclay, Curle
Cunard S.S. Co.	2	Pass. liners	—	20,000 (each)	—	20	—	—	—	John Brown
Commonwealth and Foreign Yards										
I. M. Skaugen, Oslo	1	Tanker	—	19,000	—	—	Diesel	—	—	S. A. John Cockerill, Hoboken
I. M. Skaugen	1	Tanker	—	21,500	—	—	Diesel	—	—	Howaldtswerke, Kiel
Maritime Transportation Co., San Francisco	2	Tankers	—	18,000 (each)	—	—	Steam turbine	8,800 (each)	—	S. A. John Cockerill
Frissia Reederei, Rendsburg	2	Cargo	—	5,000 (each)	—	—	—	—	—	Werft Nobiskrug, Rendsburg ; Flensburger Schiffbau-Ges. (1 each)
Translata Schiffs., Rendsburg	2	Cargo	—	1,900 (each)	223.8 b.p. 36.1 13.8 (draught)	12	Diesel	1,500 (each)	—	Yacht & Bootswerft Fr. Lurssen, Vegesack
Rederi A/B Transoil	1	Tanker	—	20,000	—	—	—	—	—	Oresundsvarvet, Landskrona
New Zealand owner	1	Cargo coaster	—	1,100	—	—	Mirrlees diesel	1,100	—	Bodewes' Scheeps. N.V., Martenshoek
British owner	1	Coaster	—	940	—	—	Werkspoor diesel	650	—	Bodewes' Scheeps.

LAUNCHES

Yards in Great Britain and Northern Ireland

Date	Shipowners	Ship's Name and/or Yard No.	Type	Approximate Tonnages		Dimensions (ft.)	Speed (knots)	Propelling Machinery	Total h.p.	Engine Builders	Shipbuilders
				Gross	Deadweight						
Nov. 28	S. African Ryds. & Harbours Admin.	S. G. Stephens (794)	Tug	160	—	93 21.25 10.5	—	Steam	500	McKie & Baxter	Richard Dunston, Thorne
Dec. —	Oil Storage Co. of West Africa	Adama	Tug	370 (disp.)	—	—	—	Tw-scr. diesel	800	Crossley Bros.	Yarrow & Co.
Dec. 6	Ross & Marshall	Moonlight	Coaster	—	—	88.5 19.5 10	—	Compound steam	—	Shipbuilders	W. J. Yarwood & Sons
Dec. 13	Leado S.A., Montevideo	Paysandu (1250)	Cargo	4,900	—	—	—	—	—	—	Wm. Gray
Dec. 14	Carrn Line	Carrnowan (1248)	Cargo	—	9,400	419 b.p. 60 37	13	Dble.-red. geared turbine	4,650	Parsons Marine	Wm. Gray
Dec. 14	Australian Steamships Pty., Sydney	Howard Smith (830)	Tug	—	—	125 b.p. 32 17.25	—	Tr-exp. steam	1,320	Shipbuilders	Hall, Russell
Dec. 14	British Railways	Lord Warden (1455)	Cross-Channel pass. & vehicle ferry	3,300	—	361.5 o.a. 59	20	Steam turbine	—	—	Wm. Denny
Dec. 17	Ulster S.S. Co.	Roonagh Head (1433)	Cargo liner	6,200	—	455 o.a. and 430 b.p. 59.25 39.33	—	Dble.-red. geared turbine	5,000	Shipbuilders	Harland & Wolff, Belfast

TRIAL TRIPS

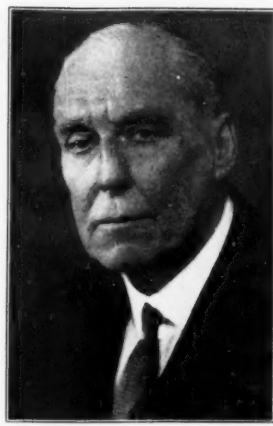
Yards in Great Britain and Northern Ireland

Date	Shipowners	Ship's Name and/or Yard No.	Type	Approximate Tonnages		Dimensions (ft.)	Speed (knots)	Propelling Machinery	Total h.p.	Engine Builders	Shipbuilders
				Gross	Deadweight						
Dec. —	British India S.N. Co.	Chakrata (1882)	Cargo liner	7,132	—	455 b.p. 62.5 40.75	—	6-cyl. Doxford diesel	6,800	Shipbuilders	Swan, Hunter & Wigham Richardson, Walker
Dec. 19	Iver Bugge, Larvik	Sunnaas (479)	Tanker	9,400	13,500	500 64.2 35.5	—	4-cyl., 2-str. Doxford diesel	4,400	Vickers-Armstrongs, Barrow	Caledon S.B.
—	Cie. Maritime des Chargeurs Reunis	General Leclerc	Pass. & cargo liner	8,250	5,400	479 o.a. and 448 b.p. 61.78 34.54	16	Tw-scr., 2-str. B. & W. diesel	8,800	Shipbuilders	Ch. et Atel. de St. Nazaire (Penhoet)
—	Yamashita S.S. Co.	Yamateru Maru	Cargo	7,150	10,615	439.7 59.1 34.5	17	2-str. B. & W. diesel	5,525	—	Hitachi S.B. & E. Co., Innoshima
Nov. —	Soc. Francaise des Transports Petroliers	Roussillon	Tanker	11,800	16,500	541.83 o.a. and 516.5 b.p. 70 38.42	13	8-cyl., 2-str. B. & W. diesel	6,000	—	Atel. et Ch. de la Seine Maritime, Le Trait
Nov. 28	Taiyo Kaun K.K.	Taiyen Maru (3693)	Cargo	6,601	9,873	450.8 o.a. and 420 b.p. 57.4 33.8	16.5	B. & W. diesel	4,600	Shipbuilders	Hitachi S.B. & E. Co., Innoshima
Dec. —	Chas. Schiaffino & Cie.	Ange Schiaffino	Cargo	4,500	5,750	414.33 o.a. and 380.58 b.p. 54.5 32.5	13.5	8-cyl., 2-str. B. & W. diesel	4,200	—	Ch. Navals de Caen
Dec. 10	Shinnihon S.S. Co.	Shikiharu Maru (3686)	Cargo	7,175	10,119	464 o.a. and 433.1 b.p. 59.1 33.8	17	Sulzer diesel	5,000	—	Hitachi S.B. & E. Co., Innoshima



Honorary Members of the Baltic Exchange

Honorary membership of the Baltic Exchange has recently been bestowed on Sir Frank Alexander and Mr. H. C. Brewer, together with Lord Leathers, Secretary of State for the Coordination of Transport, Fuel and Power. Sir Frank Alexander (left) has been made an honorary member in recognition of his services to the Baltic Exchange and to the City of London. He has been a member of the Exchange since 1905, and was chairman from 1939 to 1946. Sir Frank was Lord Mayor of London in 1944-45. Prominent in the Institute of Chartered Shipbrokers, he has been president of the Institute since 1950. He is a partner in Capper, Alexander & Company, and is a director of the Houlder Line, Ltd., and of the Alexander Shipping Co., Ltd., and other companies. He is also an underwriting member of Lloyd's. Mr. Brewer (right), who has been made an honorary member in recognition of his long services to the Exchange, has been a member since 1904 and a director for sixteen years, for the last three of which (1948-51) he was chairman. In 1929-30 he was president of the Institute of Chartered Shipbrokers and in 1932-33 he was vice-president. Mr. Brewer is a director of J. A. Billmeir & Co., Ltd., the Stanhope Steamship Co., Ltd., and other companies.



MARITIME NEWS IN BRIEF

From Correspondents at Home and Overseas

It has been announced by Lloyd's Register of Shipping that Mr. J. A. Mavor has been appointed Principal Surveyor for Italy in place of Mr. A. T. Griffith, who has resigned his appointment with Lloyd's Register to take up another position. Mr. Griffith had been in the Society's service since 1926. Mr. Mavor was appointed a Ship Surveyor to Lloyd's Register in November, 1937. During the war he was loaned to the Admiralty and attained the rank of Constructor Captain, R.N. He was mentioned in Despatches and in July, 1945, was awarded the O.B.E. It is also announced that Mr. G. Dixon has been appointed Principal Surveyor for Spain in succession to Mr. A. E. Scott, who retires from active service on December 31.

PLANS for the construction of an atomic-powered marine engine have been disclosed in Utrecht by Dr. J. M. W. Milatz, lecturing on Dutch-Norwegian co-operation in atomic development. Dr. Odd Dahl, the Swedish physicist, has designed a reactor for cargo vessels of about 5,000 tons, he said. Dr. Dahl built the atomic energy plant near Oslo, jointly operated by Norway and Holland. The weight of the engine, with fuel, will be less than that of a normal marine engine.

THE Mexican Navy Department has announced that it will acquire 17 ships of the Liberty type. The new ships will be used for the transportation of ore from mines in Piscoicola, Michoacan, and iron ore mines located along the west coast of the Republic, where it is believed that 30,000 tons of ore can be mined each month.

THE DEATH has occurred of Captain E. C. Shankland, for many years River Superintendent and Chief Harbour Master of the Port of London Authority. He was the author of two standard works on harbour practice, "Modern Harbours" and "The Dredging of Harbours and Rivers."

THREE German vessels which foundered in Swedish minefields in the Baltic on July 9, 1941, are to be salvaged by a Swedish company, assisted by German engineers.

THREE executives of E. K. Cole, Ltd., have been appointed directors. They are Mr. F. S. Allen (general works manager, radio division), Mr. John Corbishley (secretary and director of Ekco-Ensign Electric, Ltd.) and Mr. A. W. Martin (chief engineer). Three more executives, Mr. G. W. Godfrey (general sales manager, radio division), Mr. David Radford (general manager, plastics division) and Mr. W. M. York (publicity manager) have been appointed executive directors.

MR. A. A. POWELL, London branch manager and secretary of the local board of the Union Steam Ship Company of New Zealand, Ltd., is retiring on December 31 owing to ill-health, and will be succeeded by Mr. L. H. Gagen. Mr. Powell joined the company in London in 1906 and has been branch manager since 1938. Mr. Gagen joined the Union Steam Ship Company in 1935 and has been Mr. Powell's assistant since the end of the war.

ABOUT four-fifths of the cost of ships built under the Japanese Seventh Shipbuilding Programme will be covered by loans from private banks. The Japanese Government has agreed to advance the remaining fifth from U.S. aid counterparty fund. The programme calls for the construction of 13 dry cargo vessels, totalling 102,000 tons, and one tanker of 18,000 tons.

CAPTAIN H. S. ALLAN has been appointed Commodore of the P. & O. Line in succession to Capt. G. S. Stable. Apart from Naval service in both world wars, Capt. Allan has been with the company since 1913. In 1944 he commanded the headquarters ship *Largs*, flagship of Admiral Sir John Cunningham during the landings in the south of France.

THE DEATH has occurred of Mr. James D. Dunn, chairman and managing director of Raeburn & Verel, Ltd. (managers of the Monarch Steamship Company, Ltd.), Glasgow, and senior partner in the firm of James D. Dunn & Co. He had been a member of the Baltic Exchange since 1934.

THE Nippon Yusen Kaisha expects to start a service next spring calling at Hong Kong, Penang, Naples, Marseilles, Gibraltar and London.

NEGOTIATIONS for alterations in seagoing radio officers' rates of pay and conditions were successfully concluded last week. A new agreement gives radio officers increases in pay ranging from £2 to £3 15s. per month, starting on January 28. In addition, a special foreign service allowance, starting at 5 per cent of basic pay and rising to 10 per cent, will apply to radio officers required to transfer to ships permanently trading abroad.

THE FIRST three of a long series of all-steel lighters, which will eventually replace the 1,800 wooden barges now in use in the Port of New York, have been delivered into service. The design was developed by the Bethlehem Steel Company, Shipbuilding Division. The lighters are 90 feet long and 30 feet in beam, with a draught of 9 feet 3 inches. They weigh 123 tons unloaded, and have a deadweight capacity of 465 tons.

THE Mediterranean services of Whimster & Co., Ltd., are to be operated in future by Constantine Lines, Ltd., owners of the vessels comprising the fleet. The firm of Whimster & Co., Ltd., still exists, but is in effect a new company, dealing with agency and forwarding business.

THE REPAIR works at Bremen owned by Richard Adler & Company, the German shipowners, has commenced building new vessels. The first is a cargo motorship of 2,800 tons deadweight for Argo Reederei, of Bremen.

MR. HUGH BECK, London office manager of Crossley Brothers, Ltd., diesel engine manufacturers, has been appointed to a seat on the board of the company.

THE Institute of Packaging has moved into new offices at 20-21 Took's Court, Cursitor Street, London, E.C.4. (Telephone: CHAncery 5484.)

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Announcement by
**Anglo-Iranian Oil
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It has been brought to the Company's notice that the Government of Iran in disregard of its solemn obligations to the Company, of the recent Order of the International Court of Justice, and of its international obligations, attempts to sell crude oil and oil products derived from the area covered by the Convention of 29th April, 1933.

The Company is confident that no oil company of repute or any tanker owners or any brokers of standing will countenance any direct or indirect participation in the unlawful actions of the Iranian Government. Should, however, any concerns or individuals enter into transactions with the Iranian Government in regard to the oil products concerned, they are warned that this Company will take all such action as may be necessary to protect its rights in any country.

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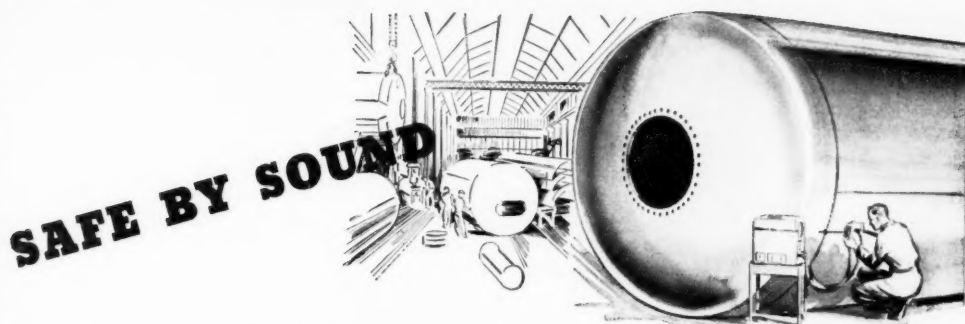
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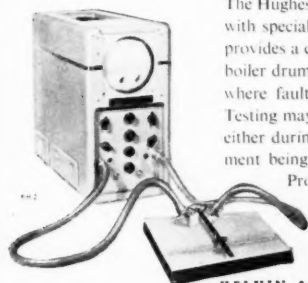
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	Page		Page		Page
Anderson, Green & Co., Ltd.	A16	Field Shipbuilding & Engineering Co., Ltd.	Back Cover	Pickersgill, Wm., & Sons, Ltd.	Front Cover
Anglo-Baltic Lines	A15	Furness Withy & Co., Ltd.	A15	P. O. and B.I. Companies	A17
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Drysdale & Co., Ltd.	A2			Wein-MacLachlan Davits, Ltd.	A7
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